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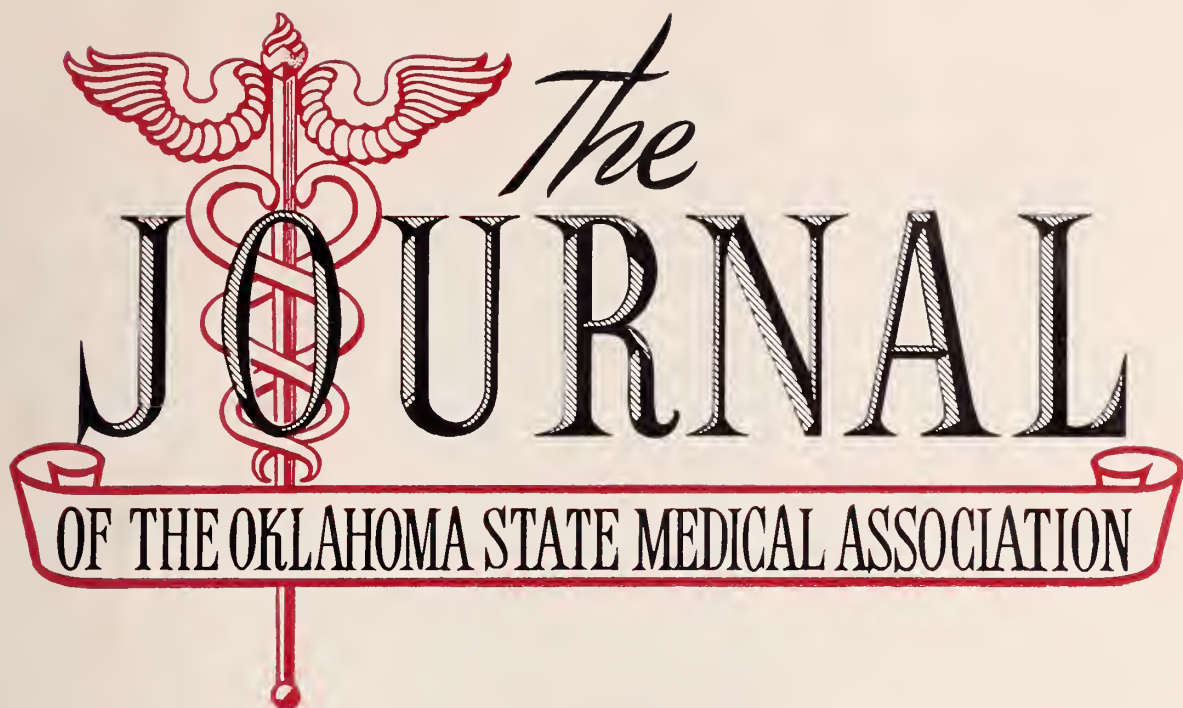
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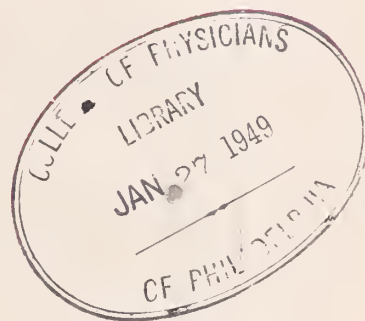
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The JOURNAL

OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

PLAN TO ATTEND THE ANNUAL SESSION
OF THE
OKLAHOMA STATE MEDICAL ASSOCIATION
May 15-19, Mayo Hotel, Tulsa, Oklahoma



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THE JOURNAL

of the

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EDITORIALS

RECENT ADVANCES IN MALARIAL THERAPY

During World War II, some 500,000 American soldiers contracted malaria and it is estimated that almost 10,000 of these continue to relapse at the present time. The Veterans Administration is striving to clear up all service acquired malaria by the end of 1949. Their records indicate that the general treatment given by the fee basis physicians has been by the use of atabrine (quinacrine). This drug, of course, is not curative. During the war, the extensive research program in the search for new chemical produced significant results and discovered invaluable information in regard to the administration of the older drugs.

The diagnosis of malaria is definitely established *only* by the demonstration of parasites in the peripheral blood, and the importance of making this demonstration before embarking upon antimalarial chemotherapy cannot be overemphasized.

Extensive studies with antimalarial drugs have demonstrated the superiority of *chloroquine* over quinine, totaquine, and atabrine, and this drug is recommended as the agent of choice in the routine treatment of acute episodes of vivax malaria. In therapeutic amounts, no significant toxicity has been ascribed to the drug. Occasionally, transient pruritus may occur but this symptom usually disappears after 12-18 hours despite continued medication. In some patients urticaria or a transient erythematous eruption may occur, but these signs are of no major toxic significance. Chloroquine does not produce any discoloration of the skin even after prolonged therapeutic or suppressive medication. Intensive daily therapy for months has resulted in the development of a lichen planus like eruption in one volunteer. Total doses of chloroquine from two to four times the recommended therapeutic doses may produce blurred vision, and difficulty in accommodation to near and far vision, in some patients. Such doses are not advised and are unnecessary for effective therapy. This

drug is marketed in 0.25 gram tablets of aralen diphosphate, a commercial preparation (Winthrop). The following schedule of therapy is advocated: Give an initial dose of two tablets. Repeat in four hours. The next morning two more tablets are given and this is repeated on the next two consecutive mornings. Thus a full course of therapy consists of 10 tablets (0.25 gram each) of aralen diphosphate in a total of four days.

If choroquine is not available, atabrine is recommended as the second choice. The suggested schedule for the latter is: An initial dose of 0.4 gram is given. In six to eight hours give 0.3 gram and repeat after another six to eight hours. On the second day 0.1 gram is given three times daily after meals, and this is continued for six days until a total of 2.8 grams have been administered during seven days.

Quinine is not recommended in the treatment of vivax malaria unless chloroquine is not available and the skin or central nervous system of the patient is hypersensitive to atabrine.

Treatment with chloroquine is not curative, and approximately 80 per cent of patients with Pacific vivax infections will relapse within 120 days after treatment. However, the interval before relapse is significantly longer than after treatment with quinine or atabrine. The mean interval before relapse after treatment with chloroquine is approximately 60 days, compared to 24 and 50 days after quinine and atabrine respectively. In some individuals, repeated attacks will occur during a period of two or three years.

Studies with combined quinine-pamaquine (plasmochin) treatment of relapsing vivax malaria conducted during the war, demonstrated conclusively that such treatment definitely cures in at least 90 per cent of cases. Unfortunately this form of therapy has certain limitations which are related principally to the potential toxicity of plasmochin. There is evidence that the major

serious toxic manifestation of plasmochin, namely, severe hemolytic crises, occurs more frequently in pigmented races than in white patients. It should therefore be given only to white patients. The advised procedure is as follows: At 8 a.m., 4 p.m., and at midnight, quinine sulfate 0.6 gram and 0.02 gram plasmochin naphthoate, are given together. Both drugs are given at the same time in the doses listed above and medication is continued at eight hour intervals for 14 consecutive days. The full course of therapy consists of 25.2 grams quinine sulfate and 0.84 grams plasmochin naphthoate. The patient should be hospitalized during therapy, his blood should be typed on admission, and arrangements should be made to have suitable blood available for transfusion if it should be needed. There is no way at present of anticipating a serious hemolytic crisis. The patient should be seen twice daily and clinical symptoms or signs of severe anemia sought for. The hemoglobin should be determined daily. If it falls 20 per cent or more on each of two consecutive days, treatment should be discontinued. If severe hemolysis is discovered, treatment with whole blood transfusions and intravenous fluids should be started at once and be continued until the reaction has been controlled. Cyanosis as a result of methemoglobinemia may be seen, but this is not an indication for discontinuance of therapy. Likewise, abdominal cramps of varying severity occur frequently, but these usually disappear or become less troublesome without interrupting therapy. During the first week of treatment, leukocytosis is common and in the second week leukopenia may occur, but these changes are usually of no clinical significance.

Recently combined quinine-pentaquine or quinine-iso-pentaquine therapy has been shown to be more effective in the cure of vivax infections than plasmochin and less toxic than the latter. However these drugs have the potential toxic properties of plasmochin, and they should be employed with the same general precautions. Clinical trials have resulted in cures of 90 to 100 per cent of patients treated. Under proper observation and with adequate laboratory facilities, pentaquine and iso-pentaquine may be administered to outpatients. At present, the schedule of treatment recommended is the simultaneous administration of 0.6 gram quinine sulfate and 0.01 gram pentaquine

or iso-pentaquine base at eight hour intervals for 14 consecutive days.

(The above information was abstracted by J. W. Morrison, M.D., from the Veterans Administration Technical Bulletin TB-10-47, dated August 4, 1948.)

INTELLECTUAL OFFENSIVE

If being alerted helps to prevent disaster, if a good intelligence service helps to win a war, why not employ the same agencies in an all out civilian offensive against the threat of socialized medicine which, if not prevented, will do more harm than all the wars put together. All wars come to an end. So-called social reforms, carrying stipends take on the habiliments of immortality. But like "wolves in sheep's clothing" they raid society and feed upon honor and integrity. Of all alleged social security measures government medicine is the most destructive.

To the medical profession this is a matter of knowledge. But the medical profession alone cannot stop the Truman-Ewing program. Yet the knowledge now in the hands of the doctors, if widely disseminated and properly employed, is sufficient to knock the Ten Year Prescription into a cocked hat. Now is the time to strike at this vicious threat. Prevention is feasible. Repeal is next to impossible. Eighty per cent of Great Britain's doctors voted not to cooperate. The Health Act was placed in operation and these same unhappy doctors found compliance their only recourse.

Britain with a long history of heavy taxation was not without warning. Even the great Dr. Samuel Johnson in his Dictionary of the English Language, 1799, gave the following definitions:

"Pension—An allowance made to anyone without an equivalent. In England it is generally understood to mean pay given to a state hireling for treason to his country."

"Pensioner—A slave of state, hired by a stipend, to obey his master."

Already there are many pensioners in the United States. Apparently they heard their master's voice on November 2. It is time for every member of the medical profession to consider the welfare of his people. They must know what medicine is doing and can do for them and why it costs more than calomel and quinine and that it still costs less than beefsteak, automobiles and television. The doctor's people are Uncle Sam's people; if the President and Mr. Ewing are so interested in their welfare why do they not meet some of the more costly more constant needs.

Doctors must show the people the real meaning of this adroit move on the part of the administration to enslave them and to entail their votes.

The doctors and the people must let the lawmakers know that more than anything else they want to remain free. If they pursue this course it is reasonable to believe that an enlightened congress will hold the Administration in line. The voters stay at home and call their family doctors when they are sick. The lawmakers know that only the voters can return them to office. If we can convince them that our aims are laudable; we have only to let them know what we want.

When this reaches the reader there will be no time to lose. Doctors must carry the news. The safety of your people depends upon what you know. The people are about to surrender. National freedom is at stake. Gassed-up motors make it possible for you to outstrip Paul Revere. Consult your conscience, coax your cortex, press the starter and get going before your freedom is gone. This is something you would not dare do after your contract is signed, your directives issued and the fine print government bulletins on your desk.

No, after this is done the bureaucrats wouldn't like it. You will find the price has been paid, you have been sold down the river, you are chattel, you must behave like chattel. There is no human failure in the history of the race so degrading to the members of a profession as a five-day, 40 hour a week job under bureaucratic orders.

One crowded day of glorious freedom is worth an age of groveling serfdom.

SPEAKING OF TRANSFUSIONS

Looking back nearly 300 years, old Pepys gives us a transfusion from the veins of the Royal Society. Much good blood goes to waste because we do not know our history.

Carter¹ in the Glasgow Medical Journal says: "At the Royal Society (and Pepys attended its scientific meetings frequently though there are few references to him in its records), in November, 1666, he saw a transfusion experiment, 'a pretty experiment of the blood of a dog let out, till he died, into the body of another on one side, while all his own run out on the other side.' The first died but the other 'very well and likely to do well.' They wondered what would be the effect if the blood of a Quaker was let into an Archbishop, but Dr. Croone (the

original Croone of the Croonian lectures) thought it may be of use to man's health 'for the amending of bad blood by borrowing from a better body.' Next year he records that the college had hired a man to have some sheep's blood let into his body. It was proposed to let in about 12 ounces, and apparently it was done and the man was no worse. Indeed he said he felt better for it, though Pepys wrote him down as being 'cracked a little in his head.'"

1. Carter, H. S., M.D., D.P.H.: Samuel Pepys and His Diary: A Digression, Mainly Medical. Glasgow Medical Journal, 29:6:212 (June) 1948.

RETROPUBIC PROSTATECTOMY

Like operations upon many other parts of the human body, there has not been developed an ideal method for the removal of the prostate gland for vesical neck obstruction.

The generally accepted methods of removal or partial removal of the prostate gland have been three in number. The suprapubic with its higher mortality and longer morbidity, a technique which does not seem rational, as it requires an approach through the vesical mucosa twice to reach a gland that lies wholly outside of the bladder. The transurethral resection which at best only removes a portion of the gland and often requires more than one operation with the always present danger of postoperative hemorrhage. The peritoneal route requires one with experience to be satisfactory although it is probably the best technique for radical dissection in carcinoma of the prostate gland.

Mr. Terance Millin, the London urologist, has described an operation that he terms "Retropubic Prostatectomy" which answers better than any other technique the problem of the satisfactory removal of the prostate gland.

In this technique a suprapubic incision is made, the peritoneum and bladder are reflected, a transverse incision is made through the capsule of the gland, outside of the bladder and the adenoma enucleated. Hemostasis is important which is easily accomplished and the entire operation is under direct vision. A Foley retention catheter is inserted into the bladder and the capsule of the gland closed over the catheter.

Grant and Lech (Annals of Surgery, Vol. 127, No. 5) in this country describe the operation in detail and report 95 cases with no mortality, no fistula, no incontinence, and no loss of sexual potency.

This may be the answer to the urologist's prayer!

SCIENTIFIC ARTICLES

RESPONSIBILITIES OF THE GENERAL PRACTITIONER FOR THE CARE OF THE PSYCHIATRIC PATIENT*

JACK R. EWALT, M.D.**

GALVESTON, TEXAS

At this moment, there are in the United States approximately 1,100,000 patients ill enough to occupy hospital beds. Of this number in excess of 625,000 are suffering from nervous and mental diseases serious enough to necessitate their isolation from the public, and their retention in a hospital. In addition to this, there are many patients who suffer from the so-called minor reactions or psychoneuroses who are occupying some of the 600,000 general hospital beds plus the large number warming chairs in your waiting rooms while you are attending conventions. In spite of this numerical distribution of case material, of all the physicians in the United States today, only 4,000 are practicing psychiatry and about half of these are employed in the large public owned hospitals for the chronically ill. This means that for the present, the bulk of the burden of the care of these patients must rest with the general practitioner. Failure to meet this problem will drive ever increasing numbers to the irregular practitioners. The purpose of this paper is to suggest ways of detecting these illnesses in their formative stages and to suggest some ways of effective management of them. For purposes of clarity, the patients will be divided up into several categories.

The most important group of patients are the psychoneurotics, those individuals who, meeting life's situations that are too difficult for them to master in terms of their own inheritance, their own education and their own philosophy of life have resorted to physical complaints to assist them in the solution of their problem. You are all aware of their presence; most of you have little

difficulty in detecting them among your office clientele, and some of you speak of them rather disdainfully as "the good old neurotic," yet, probably all of you have profited at least to some degree from injections of sodium cacodylate or various unnecessary high priced vitamin preparations, which you have squirted into them.

The proper management of the neurotic patient begins with the physician's basic attitude toward any and all patients who enter his office. Most of us assume that we examine each patient without bias or prejudice. Yet, in spite of this assumption on our part, we are all human beings and tend to examine patients for manifestations of certain types of disorder that we are particularly interested in. The best insurance against leading questions is to allow the patient to talk freely concerning his complaint or complaints when he first comes into the office and confine most of our questions to "when," "how," "where," and "why." Having allowed the patient to outline his complaints, then a little judicious questioning will present the evolution of the present illness. In many neurotic patients one will be impressed by the multiplicity of the complaints, their shifting character, and in many instances, their unphysiologic nature, but in many others the complaints will closely simulate on organic disorder. Even though you feel certain that the basic difficulty is that of a neurosis, the original physical and laboratory studies should be extremely complete. This has two values; in the first place, the mere presence of a neurosis does not give an immunity to some somatic disturbance any more than the somatic disturbances makes a neurotic component untendable in the diagnostic evaluation. Furthermore, the patient will be impressed by the thoroughness of the physician, and the physician as-

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association May 17, 1948.

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sures himself that no serious somatic pathology exists with the neurosis. If somatic pathology is encountered this should be explained to the patient and the symptoms that he complains of explainable on this basis should be so evaluated. The additional complaints, if present, should be evaluated on the functional basis; that is, on a neurotic basis, providing that is your final conclusion. For example, we recently had a man to come in who gives a prolonged history of innumerable neurotic complaints and he also complains of epigastric pain and gastro-intestinal disturbances strongly suggesting partial obstruction. The patient had been referred to us by an internist as having a psychoneurosis and insofar as the diagnosis went it was absolutely correct. Gastro-intestinal studies however revealed the patient also had a diaphragmatic hernia with part of the gut shoved up into the pleural cavity and upon relieving this the obstructive symptoms disappeared, leaving the neurotic complaints to be handled by psychotherapeutic methods. If the physician can train his own attitude to the point that he regards neurotic complaints on the same basis and of equal value to the somatic complaints the patients will come to accept the condition the same way. For example if a patient enters complaining of gastro-intestinal disturbances and all the studies, both clinical and laboratory, show the gastro-intestinal function to be disturbed in terms of anxiety and tension and the incident autonomic imbalance, and not due to a structural change, the patient will often ask why he has pain. This can be explained to them in terms of muscle tension and gut spasm, secondary to the autonomic imbalance. We usually give the patient an explanation in terms of fear and flight reaction using as many of the patient's own words as possible. The patients are usually able to follow this explanation which takes a surprisingly short period of time once one becomes adept at it and has the full attention of the patient. The patient is then able to accept his pain as being genuine, but secondary to some cause other than structural lesions of the gastro-intestinal tract. The patient is then told that the problem remaining for him and the physician is to find what gives him the anxiety and tension. He is also reassured concerning the immediate seriousness of his problem and told that when he feels the pain he is to divert his attention to things other than his body function. He is told that getting excited about his symptoms make him more

tense, aggravating the symptoms and thus giving him more to worry about. In many instances we give them small doses of phenobarbital or belladonna, always with the explanation that this is to relieve the nerve tension and the patients are repeatedly reassured that this is not for the stomach itself. The physician defeats his purpose if he spends 30 minutes explaining to the patient there is nothing structurally wrong with his stomach or bowel, that it is all due to nervous tension, and then as the patient is ready to leave gives him a prescription, saying "Here is a little something for your stomach." The therapy in the neurotic patient up to this point is the obligation of the general practitioner and should be managed by him. As to whether the general practitioner wishes to take the time and gain the additional skills to carry the patient beyond this point is a matter that rests with the practitioner. If, in eliciting the history, or if the patient tells him of some maladjustment in the social or economic sphere which he can relieve for the patient through his knowledge of the workings in the community he probably will bring about the cure himself. If, as in some instances, the difficulty is based on the faulty attitude toward the sexual function on the part of one or both partners or due to some clumsiness in technique the physician may again be able to advise the patient and eliminate the difficulties in a fairly brief manner. In some cases, however, it will be found that these superficial difficulties do not exist and that the patient's attitude is apparently a deepseated one based on unconscious mechanisms. The latter cases should probably be referred on to psychiatrists. In these cases however the physician has gained much by his efforts to relieve the patient and the patient goes on to the psychiatrist with a much better attitude towards his problem and will save the psychiatrist innumerable hours in trying to sell the patient on the functional nature of his illness. In a large University Clinic, such as the one I am associated with, we have a great many patients who are being handled by two or more services simultaneously. It is not uncommon for us to be treating a patient for neurotic factors while the Chest Service takes care of the patient's tuberculosis. In other instances patients may have dermatological lesions of a non-psychogenic nature or may have illnesses such as diabetes, heart difficulties and so forth in which the appropriate service takes care of the somatic

pathology while we attempt to manage the functional aspect of the disorder. We have had several interesting patients suffering from asthma which have been handled conjointly by the allergists and the psychiatrists with much better efficiency than either of us could have handled the patient alone. Here again, the general practitioner with his broad grasp of the overall medical picture is often much better suited to handle patients whose difficulties are on a fairly superficial level than the specialists surrounded by all the mysterious paraphernalia of a large teaching center. Others of you living in more remote areas may not have psychiatrists handy to whom you may refer your patient and some individuals lack the funds to travel several hundred miles and stay a matter of several weeks in a hospital or hotel while making office visits to trained psychotherapists. In those instances, I think the general practitioner will find it worthwhile to gain some knowledge of the pentothal or sodium amytal technique. These will often aid in uncovering deepseated material which the patient has not been willing to face. I believe that the practitioner need have little fear that he will dig out material that he is unable to handle. While it is possibly true that in an occasional patient a panic may be precipitated, in far more patients you will be unable to get any interesting material, but the confidence developed and the dependence of the patient on you will bring much relief of the symptoms. In time you will come to realize that much of the value of your therapy in any patient is the fact that the patient has formed strong emotional ties to a stable, knowledgeable, dependable person, whom they in effect "climb up on" as they attempt to gain greater emotional maturity.

Another large area of activity for the general practitioner is in the field of the organic reactions. It should be remembered that between 35 and 40 per cent of all mental patients have their pathology on the basis of an organic disease of the brain. The general practitioner can handle most of these patients if they are seen early enough, and if the condition is recognized for what it is. The commonest early sign of an impending organic state is the beginning of irritability and other signs of emotional instability peculiar to that individual. The family of the patient usually notice that his personality has become changed in such ways as a decreasing sense of responsibility, development of various little

anti-social habits not present in the patient before, disturbance in memory and defects in judgment. As an example of this: I recently saw a cattle man who was brought by his wife for the following reasons. He had been previously a very moral person and recently he had taken to running around with young women in a very open and flagrant manner. The wife was somewhat concerned about this, but she decided there was something really wrong when she discovered that he had bought 80 head of thoroughbred Hereford cattle, supposedly pregnant. When they were brought to the ranch and examined by the ranch hands it was found that all of the cattle were "canners." Since the patient had amassed a sizeable fortune in the cattle business, the wife decided there was something seriously wrong with him. It proved to be an early arteriosclerotic reaction with some brain atrophy.

The management in these cases consists in running down the pathology. If the condition proves to be beginning senility or arteriosclerosis with beginning brain changes on that basis, little in a curative way can be done. Many of these patients are helped by large intakes of vitamins, careful attention to diet and the use of some type of cerebral vasodilator. The best one in our experience has been nicotinic acid, 400 milligrams per day, but such things as stellate ganglion block, t.i.d. ingestion of an ounce of whiskey and CO₂ inhalations have also been recommended and are of some benefit. If the organic basis proves to be general paresis or vascular neurosyphilis, the general practitioner can treat this with penicillin as well as the specialist. The total dose is still a matter of some argument but doses in the neighborhood of 8,000,000 to 10,000,000 units are probably indicated. In our experience the intramuscular route is as effective as any other and in my opinion preferred to the intrathecal route.

Presence of a brain tumor, of course, necessitates referral to the neuro-surgeon.

The other types of organic reactions probably will require the services of a specialist but since the vast bulk of them are brought about by the vascular disease, senility and syphilis of the nervous system, the general practitioner can relieve the overburdened psychiatric facilities of the country of a large proportion of these three categories of organic patients.

Another large group of mental reactions seen by the general practitioner will be the

toxic or delirious states. Most of these will be due to injudicious use of sedatives or alcohol, but some of them will be due to severe infectious disorders, such as pneumonia or peritonitis, and others due to thyroid dysfunction, renal failure or cardiac decompensation. These cases always start with periods of confusion and apprehension, followed by vivid hallucinatory experiences. The patients are fearful, excitable and interpret routine happenings as threats against their life. They appear to be grossly psychotic. Great skill in nursing care is required in these patients. All nursing and medical procedures should be carefully explained to the patient in advance. His room should be kept cheerful and well lighted as they tend to misinterpret shadows or dirty spots on the wall, as threatening objects. The patient should be protected from falls from windows or stairs if he attempts to escape from his tormentors. Rooms with protective screens are helpful, but in their absence special nurses or members of the patient's family can often keep the patient reassured and quiet. A judicious use of sedation directed toward making the patient rest and sleep at night is an important measure. In our hands paraldehyde and the quick acting barbitals are the drugs of choice. It is extremely important that the patient be well nourished and have sufficient fluid intake. If these are not taken by mouth the patient should be sedated and then given a gastric feeding. Gastric feeding, because of the protein content that can be included, is preferred to the usual venoclysis of saline and glucose. In patients showing any sign of circulatory failure or oxygen lack, oxygen inhalations will be of great help in improving the mental processes. All toxic patients are given large doses of mixed vitamins parenterally as deficiency states play some role in producing the delirium. In addition to these general supportive measures, the source of the toxic state

should be found and removed or alleviated as much as possible.

The major psychoses such as schizophrenia and the manic depressive diseases are strictly cases for the specialists. The family doctor recognizing these illnesses should refer their patients as promptly as possible as treatment is most effective in the early stages of these diseases.

As a further step in managing these patients, the physician in general practice should encourage the general hospital to place certain facilities into their hospitals which will make it easier for them to handle their organic patients and the toxic or delirious reactions. These facilities require very little in addition to the ordinary standard hospital construction. Most important is to equip four or five rooms per hundred bed hospital with sound proofing materials which can be made an integral part of the room decorations and not distinguishable by any other than an experienced or trained architect. Detention screens should be placed on the window to prevent suicidal patients from jumping out and these should be of the type not readily distinguishable from any other type of window screen. These rooms can be then used for ordinary patients unless they are needed for psychiatric patients. If a psychiatric patient enters and is disturbed or noisy, the patient can be confined to his room with a special nurse, or with frequent visits from the regular nursing staff. Expensive hydrotherapy equipment is unnecessary.

Another important phase is refresher courses for physicians, internes and nurses with emphasis on the management of these patients in the daily routine of medical practice. The training of our students should emphasize the recognition and management of the early psychiatric problem. Only by great effort and cooperation of all the practitioners of medicine can we even begin to cope with the large numbers of psychiatric problems.

National Foundation for Infantile Paralysis announces fellowships in all fields of research, physical medicine and public health. Applications or information should be addressed to the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, N. Y., at any time during the year.

PULMONARY COMPLICATIONS IN HODGKINS DISEASE AND THE TREATMENT*

L. F. SHRYOCK, M.D.

ENID, OKLAHOMA

Pulmonary involvement is a frequent finding in Hodgkin's disease. Vieta and Craver¹ demonstrated intrathoracic involvement in 88 percent of cases which came to autopsy. Lesions have been demonstrated roentgenographically in a somewhat smaller percentage. Pierce², in 1936, reported pulmonary involvement in 38 percent of cases studied. In 1944, Walpaw, Higley, and Hauser³ reported a series of cases showing intrathoracic involvement in 63 percent of cases studied.

Hodgkin's disease arising primarily in the pulmonary tissues is rare⁴. Careful examination will usually reveal enlarged nodes elsewhere.

Classifications of the lesions may be divided into (1) mediastinal, (2) parenchymal, and (3) pleural. This classification is arbitrary and most cases show more than one type of invasion; however, one type is usually predominant. The degree of involvement is usually greater than clinical symptoms would suggest, and not infrequently lesions are found with no clinical symptoms. For this reason a chest film should be made at fairly regular intervals in all cases of Hodgkin's disease.

The mediastinal nodes are more frequently invaded than the other pulmonary structures. Any of the lymph nodes from the peritracheal region to those about the major bronchi may be involved.

Usually a discrete localized shadow is noted on the roentgenogram; however, if several nodes are involved the shadow may be of considerable size and appear lobulated. Without a complete history and physical examination these lesions may not be differentiated from the other mediastinal tumors, roentgenographically.

These nodes are usually in the middle mediastinum and must be differentiated from aneurysm, substernal thyroid, tuberculous glands in children, the leukemias,

lymphosarcoma, and sarcoid. Dermoids and lipomas are usually in the anterior mediastinum and neurofibromas in the posterior mediastinum. Fluoroscopic examination may show an expansible pulsation and aid in the diagnosis of aneurysm. Likewise, calcium deposits are often present in aneurysm and dermoids. History and physical examination, plus tuberculin test, aid in ruling out substernal thyroid and tuberculous nodes.

The leukemias may usually be differentiated by blood count. Lymphosarcoma is very similar to Hodgkin's and often require biopsy for differential diagnosis. Likewise, node biopsy or biopsy of a skin nodule will rule out sarcoid. At times a "therapeutic test" of roentgen therapy may be used. A dose of about 800 roentgens is given to the area. If the lesion is due to Hodgkin's disease, the nodes will most always regress somewhat in size while other lesions will show no change. Tuberculosis should be ruled out before roentgen therapy is given.

Case 1: B. C., a 53-year-old white female, who was first seen in April, 1944, complaining of cough and extreme dyspnea. Patient stated she noted some swelling in the right axilla in June, 1943. A few months later there was a slight swelling in the left axilla. In January, 1944, patient began coughing and soon noticed some dyspnea. These symptoms were progressive. Patient stated she had lost 50 pounds in the past year. Examination showed moderate enlargement of glands in both axillary regions and no other physical findings. Chest films showed marked widening of the mediastinal shadow, which is fairly typical of mediastinal involvement. (Fig. 1.) A biopsy of an axillary node was diagnosed as Hodgkin's disease. The patient was given x-ray therapy, 800 roentgens to each axilla and 800 roentgens to two anterior chest fields, directed to the mediastinum. The lesions regressed almost completely and patient was symptom free for nine months at which times nodes appeared elsewhere.

*From the department of Radiology (John E. Heatley, M.D., Director), University Hospitals, University of Oklahoma School of Medicine.

Parenchymal involvement is the second most common type and may present itself in various forms. The lung parenchyma contains many lymphatic vessels and lymphoid collections. These may be invaded in various manners. There may be a direct invasion from a bronchial node into the parenchyma, by the lymph channels following the bronchi and vessels, and produce a rather dense shadow which may very closely simulate carcinoma of the lung. At times the bronchial wall may be infiltrated and produce an ulceration within the bronchial lumen. This may appear as carcinoma by bronchoscopic examination and biopsy will show Hodgkin's disease. At other times the lumen may be obstructed by granulation tissue and produce atelectasis. Another form occurs when the lymphatic invasion from the hilus is in a linear manner. This form may appear as bronchitis or lymphatic type of metastasis. Not infrequently the disease may infiltrate the collection of lymphoid cells at the branching of the bronchi and pulmonary arteries. These produce fairly well circumscribed nodules and may be mistaken for pulmonary metastasis. Less frequently there may be a lobar or lobular infiltration. The former must be differentiated from pneumonia and the latter, especially in the apical areas, must be differentiated from pulmonary tuberculosis.

Cavitation is infrequent but at times does occur as a result of necrosis. Purulent expectoration is present and such cavities may not be differentiated from tuberculosis with cavitation or carcinoma of the lung with cavitation.

Case 2: H. O., A 59-year-old white male first seen in February, 1945. Patient stated he had noticed some enlargement of cervical glands for two years. About eight months prior to coming to the clinic, he had developed a cough which had become progressively more severe. Examination revealed moderately enlarged nodes bilaterally, in the cervical, axillary, and inguinal areas. A biopsy of an axillary node was diagnosed as Hodgkin's disease. Chest film showed an area of infiltration radiating into the right middle lung field and had appearance of a carcinoma of the lung. (Fig. 2.)

Case 3: M. R., A 31-year-old white female, first seen in October, 1944. The patient had first noticed a dry cough in February, 1944, which had persisted and become more severe until time of admission. In March, 1944, the patient fell and injured the left mandible and one molar tooth was loosened

by the fall. This was extracted a few days later and soon a node appeared beneath the left mandible. Hot packs were applied to this lesion for six weeks but the node continued to slowly increase in size. Examination revealed a single firm discrete node in the left submaxillary area. Chest film showed numerous areas of increased density throughout both lung fields, with an area of atelectasis in the right apex. (Fig. 3.) A diagnosis of metastatic malignancy was made. Biopsy of the submaxillary node showed Hodgkin's disease. The patient later stated she had been given x-ray therapy 10 years previously for enlarged nodes in the right side of the neck which had completely regressed. Pleural effusion occurs in about 15 percent of cases. This may be due either to involvement of the lymphatics of the pleura directly or by interference of circulation by mediastinal massing.

Case 4: W. J., A 29-year-old white female who first noticed some pain and pressure symptoms in the upper chest in March, 1943. This continued and in September, 1943, the patient began having afternoon fever. A diagnosis of Malta fever was made after a positive agglutination test. In October, 1943, dyspnea appeared and 3000 cc. of clear fluid was aspirated from the right chest. At this time enlarged nodes in the right cervical area were noted. X-ray therapy was given to the right cervical area and to the mediastinum.

In July, 1944, the patient was first seen in the clinic and at that time there were bilateral axillary nodes, an enlarged liver and spleen, and a mass in the right breast. The veins over the anterior chest were distended. A biopsy of an axillary node was diagnosed as Hodgkin's disease. A chest film showed some widening of the mediastinal shadow and an area of increased density in the right upper lung field. X-ray therapy was given on several occasions during the next year and in July, 1945, dyspnea again occurred. Pleural effusion was noted. (Fig. 4) This was aspirated on several occasions. Patient expired in December, 1945, and autopsy showed a mediastinal mass surrounding and constricting the trachea and great vessels.

Therapy in pulmonary Hodgkin's disease is largely palliative. Just as in Hodgkin's disease elsewhere in the body, the patient must be kept in good general condition. Transfusions are frequently necessary. There are no medications at present which seem to influence the course of the disease. Fowl-

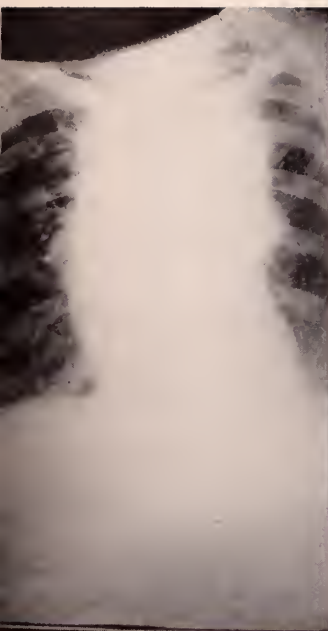


Fig. 1: Marked enlargement of mediastinal glands.



Fig. 2: Infiltration radiating into the right middle lung field simulates carcinoma of the lung.



Fig. 3: Area of atelectasis in the right upper lung and smaller areas of infiltration suggest pulmonary metastasis.

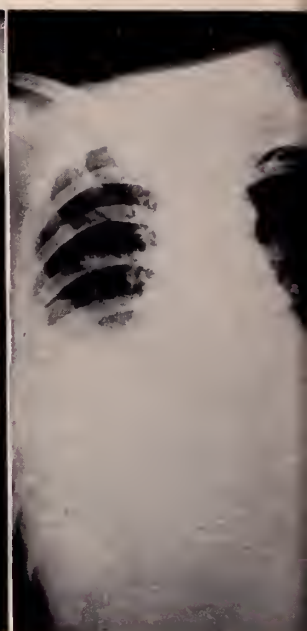


Fig. 4: Mass in the right mediastinum with pleural involvement in the right base.

er's solution is no longer mentioned in most text books. Radioactive phosphorus, which has been beneficial in the leukemias, has been of some value but is inferior to roentgen therapy⁵.

Roentgen therapy is a treatment of choice at the present time. In most cases clinical symptoms are relieved and in many the duration of life is prolonged. The method of roentgen therapy is quite varied. Desjardins⁶ recommends the use of x-rays generated at 140 K. V. and giving each field 550-600 roentgens at a single dose. Others^{3, 7} prefer to use x-rays generated at 200 K. V. and giving divided doses of 100-200 roentgens per day until a total of 800-2000 roentgens per field is given. The total dose depends upon the general condition of the patient and the response of the lesions, which is followed by serial films or fluoroscopic examination.

SUMMARY

Pulmonary complications are frequent in Hodgkin's disease. Careful history, physical examination, and laboratory studies are essential in establishing a diagnosis. A biopsy should be obtained whenever possible. Roentgen therapy is in the treatment of choice and should be given to all patients when possible.

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MEDICAL SCHOOL

Captain Roy R. Raub, AMC (Med '46) was a visitor in Oklahoma City last month. Raub is stationed at Camp Lee, Virginia, where he is doing orthopedic surgery.

Three members of the class of 1947 have begun general practice. They are: Dr. Frank James, who has

located at Odessa, Texas; Dr. Grady Ryan, Healdton, Oklahoma, and Dr. Clarence P. Taylor, Jr. Ada, Okla.

First Lt. Mark R. Johnson AMC (Med '46) was in Oklahoma City on a furlough in November, 1948. He has had nine months duty in the Azores Islands and has returned for another year.

'THE ACUTE JOINT' *

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As most of us are a little hazy, if not a little confused, in our working knowledge of acute articular afflictions, it was thought worth while to review our existing knowledge on this subject. There are over 100 types of arthritis and 200 types of "rheumatism," according to Hench¹ and it is just as essential to differentiate accurately these rheumatic diseases as it is to diagnose pathology elsewhere.

Of the true arthritides, only eight or so are encountered with sufficient clinical frequency to warrant discussion in a paper of this type. These will be discussed somewhat in their order of frequency as encountered in an orthopedic clinic:

1. *Acute Traumatic Arthritis*. Do not confuse traumatic arthritis with the traumatic exacerbation of some pre-existing joint disease. The pain and disability follow the injury immediately, not 12 to 24 hours later. Be wary of the joint whose reaction is out of proportion to or delayed following the trauma. A careful history helps avoid this pitfall. Gout is especially thought of where severe joint reactions follow trauma.

If there is any effusion, or if the severity warrants, roentgenographic studies are necessary to exclude fractures or dislocations and to differentiate a pre-existing bone or joint disease. The general physical examination and laboratory studies are normal. The synovial fluid, however, may contain red blood cells or increased bilirubin if there has been intra-articular bleeding. Management is according to orthopedic principles.

2. *Acute Rheumatoid Arthritis*. Whereas rheumatoid arthritis is essentially polyarticular, systemic in nature, and likely destined to become chronic, it is occasionally ushered in by one joint being inflamed.

Acute rheumatoid arthritis may occur in either sex at any age and any joint may be involved. There may be a history of recent infection, parturition, or emotional shock. Minor trauma may play a secondary precipitating role. The joint involved is likely to be a large one, is tender to pres-

sure, painful on motion, and has both soft tissue swelling and effusion. Local heat and discoloration, when present, is moderate. The patient with acute rheumatoid arthritis has general malaise and an elevated temperature and pulse. The roentgenogram is normal at this stage but the sedimentation rate is rapid and there is usually a mild secondary anemia. The synovial fluid is turbid, likely to clot, has a low viscosity, a total leukocyte count above 2000 per cubic mm., 50 per cent to 90 per cent polymorphonuclear cells, and has a protein content of more than five grams per cent. These findings are also present in certain specific infectious arthritides².

The etiology of rheumatoid arthritis is not known and authorities disagree, not only as to its nature, but even to its existence as an entity. Clinically, it may resemble rheumatic fever, gonorrheal arthritis, or the collagen fiber diseases. This latter group of diseases includes rheumatic fever, disseminated lupus erythematosus, periarteritis nodosa, dermatomyositis, etc.

Continued observation may be necessary to establish definite diagnosis.

There is no specific treatment, but spontaneous remission is not uncommon. Twenty to 25 percent, however, are destined to progress to severe polyarticular crippling. The earlier treatment is begun, the better the prognosis. Frequent small transfusions and gold therapy are of value. Physical therapy and orthopedic apprehension of deformities are imperative. Very careful attention to the patient's general health and welfare is also very important.

3. "*Acute Primary Osteoarthritis*." Primary osteoarthritis is generally a chronic polyarticular disease but occasionally it begins as a single joint inflammation. A traumatic exacerbation of a subclinically involved joint is the usual occurrence, but occasionally a Heberden's node is seen in spontaneous flareup. The Heberden's node is pathognomic of primary osteoarthritis, but it is to be differentiated from such deformities as a baseball finger.

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

The osteoarthritic patient, usually beyond 40 years of age, is healthy and feels well. The pain is comparatively less severe and the joint is more likely to be crepitant than that of rheumatoid arthritis. The laboratory data are normal and early roentgenograms are not too characteristic of an individual joint, but they are characteristic in location. Hench¹ has pointed out that the metacarpophalangeal joints are never involved and the joints of greatest trauma are more likely to be inflamed. In a traumatic exacerbation of a pre-existing osteoarthritis the joint space may be variably narrowed, the subchondral bone normal or of increased density, and marginal lipping may be present.

The treatment of an acutely inflamed osteoarthritic joint is supportive. Rest, heat, and analgesics while awaiting spontaneous remission are all that are necessary. This is not a crippling disease, but as in rheumatoid arthritis, the management should extend beyond the acute articular phase.

Secondary osteoarthritis is essentially a traumatic or microtraumatic lesion where repair cannot cope adequately with wear. Efforts should be made to control the underlying chondral and osseous atrophy³ as well as the trauma.

4. *The Acute Arthritis of Rheumatic Fever.* In this systemic disease only a relatively small per cent begin as a monarticular disease. Suspicion is aroused by the elevated temperature, general malaise, heart murmur (rarely present this early in rheumatic fever), and local joint heat, effusion and discoloration. An elevated sedimentation rate, a serially altered electrocardiogram, and therapeutic relief with salicylates confirm the diagnosis. The synovial fluid has a high cell count, usually over 5,000 per cubic mm., with around 90 per cent polymorphonuclear cells early in the infection. Large phagocytic cells may be present⁴.

Time does not permit the discussion of rheumatic fever, the disease, but it is important to point out the difference of this illness from a local joint affliction. The patient and his family must be made to understand and appreciate the potentia of this joint abnormality.

5. *Acute Gouty Arthritis.* Do not forget this disease. Certainly our information on gout is meager, but at least it is adequate to facilitate satisfactory management, once the diagnosis is established. Any acute joint occurring in a person past 40, or in a pa-

tient within five days following surgery⁵, or in a man with strong diabetic⁶ or gouty familial tendency, indicates the diagnosis of gout. Minor trauma may precede the episode and a previous history of isolated severe joint attacks is significant. There is actually some predilection for the foot and bunion joint and over 90 per cent of the patients are men. The presence of an acute olecranon bursitis suggests a gouty involvement. Acute gouty arthritis rarely involves the hips, shoulders, or spine. The patient is usually robust, and complains bitterly of pain. An elevated blood uric acid and sedimentation rate are usually present. The roentgenogram may show the punched out areas usually described, but this is seen occasionally also in rheumatoid arthritis and is not always present in gouty arthritis.

A therapeutic response to colchicine, and a purine free, low fat diet will aid in diagnosis in obscure cases. Once the diagnosis has been established, the patient must understand that gout is a chronic disease, punctuated with acute articular episodes, and capable of producing invalidism in many instances. One should familiarize himself with the current knowledge regarding this disease⁷⁻¹³ before outlining treatment for the patient.

6. *Acute Bacterial Arthritis.* Most any pathogenic organism can be involved and many of these produce serious reactions. A true emergency may exist as delay in diagnosis can result in ankylosis of the joint. The more common infections will be mentioned.

a. Gonorrheal arthritis has diminished greatly with the use of penicillin but it still occurs. It is to be differentiated from other acute articular phenomena, and any acutely inflamed peripheral joint occurring during a pregnancy is most likely gonorrheal.

Only 15 per cent of the cases of acute gonorrheal arthritis actually begin as a monarticular affair and remain so, and this further reduces the chances of a solitary acute joint's being gonorrheal. As this infection can result in ankylosis, prompt treatment is mandatory. Coexisting or recent urethritis, especially if gonococci has been demonstrated, strongly suggests the diagnosis of gonorrheal arthritis. It should be remembered that Reiter's disease is also characterized by a urethritis occurring along with arthritis, conjunctivitis and diarrhea. The patient may have a mild systemic

reaction of malaise, increased temperature, and pulse, and the other usual signs of gonorrheal infection. The sedimentation rate is elevated, gonococci may be found in the urethral discharge or synovial fluid. The gonorrheal compliment fixation test used in some centers is positive in 80 per cent of the patients at a later stage, but in the early period when diagnosis is so necessary, it is not a reliable test.

The roentgenogram is non-contributory in early stages. The synovial fluid usually has a cell count above 2000 cells per cubic mm. Anaerobic cultures are more reliable in identifying the organism than is a direct smear. The compliment fixation test is not likely to be positive if the blood is not. Penicillin is specific but occasionally artificial fever or sulfonamides may have to be used to supplement the treatment if penicillin is not tolerated. When penicillin is used the dosage should be sufficiently high and continued long enough until the joint has healed completely.

b. Invasion with other Purulent Organisms. Streptococci and staphylococci are most frequently encountered in direct bacterial infection of joint spaces, and when they do occur, produce a grave situation. Immediate treatment is necessary, not only to preserve the joint, but to prevent a fatal outcome. Synovial fluid examination offers the only positive diagnosis and this is to be considered as an emergency procedure. Aside from identifying the organism by smear and culture, diagnosis is aided by a cell count of over 10,000 per cubic mm. with over 90 per cent polymorphonuclear cells.

The local joint signs are intense, and the systemic reaction is severe. Chills, fever and prostration may be profound. The nature of the onset is quite variable; direct wounds, hemogenous infection, invasion from adjacent structures, all contributing.

Treatment should be begun immediately after the diagnosis is established, or even sufficiently suspected. Penicillin is the treatment of choice unless the organism present indicates some other type of specific therapy. By this is meant that if the organism recovered does not respond to penicillin therapy, the indicated therapeutic agent should be used. Intrathecal installation and surgical drainage are still necessary in some advanced infections.

c. Syphilis is capable of producing an acute synovitis, particularly during the early secondary stage. Any joint may be in-

involved and is accompanied with an effusion and stiffness, but rarely soft tissue swelling. It is usually monarticular and diagnosis is made by suspicion and serological studies. Syphilitic synovitis is extremely rare. The synovial fluid contains 1000 to 5000 cells, with variable preponderance of lymphocytes or polymorphonuclear cells. The treatment is the same as for syphilis elsewhere.

d. Other Acute Infections of the Joint. Rarely, minor epidemics of specific forms of arthritis may occur. Several members of this audience dealt with "Bougainville Arthritis"⁸ and such epidemics as "Haverhill Fever"⁹ have been recorded. For consideration of these forms of arthritis, one is referred to the "Rheumatism Review"¹⁰ which is published annually.

7. A few of the more unusual forms of arthritis capable of producing acute inflammation are listed:

- a. Allergic arthritis (serum sickness).
- b. Reiter' disease¹¹ (urethritis, conjunctivitis, diarrhea and arthritis).
- c. Periarteritis nodosa.
- d. Rheumatoid spondylitis.
- e. Intra-articular loose bodies.
- f. The chondropathies.

8. Some of the conditions likely to be confused with acute arthritis but which are not acute arthritis and must be differentiated are also listed:

- a. Bursitis.
- b. Tendinitis, and tenosynovitis.
- c. Ischemias and reflex sympathetic dystrophy (causalgia).
- d. Thrombophlebitis.
- e. Osteomyelitis and adjacent infections.
- f. Radiculitis and neuritis.
- g. Neoplasms, primary and secondary, and the leukemias.
- h. Lupus erythematosus disseminata.
- i. The rarefying disease of bones.
- j. The erythemas.

In general, it might be said that pending diagnosis, immobilization of the part, heat, and analgesics should be used. Orthopedic principles of management should always be borne in mind and occasionally local novocaine anesthesia is of marked temporary benefit.

As a routine procedure, when any acute joint inflammation is encountered, the history probably contributes 80 per cent in making a diagnosis, and the physical examination, laboratory and x-ray studies about 20 per cent. Routine laboratory stud-

ies include a complete blood count, sedimentation rate, urinalysis and examination of the synovial fluid when possible.

Occasionally, however, additional laboratory studies are indispensable and are likely to include:

1. Urethral and cervical smears, cultures and compliment fixation test for gonorrhea.
2. Blood uric acid for gout.
3. Serological studies for syphilis.
4. Electrocardiogram for rheumatic fever.
5. Synovial fluid studies² where one notes the appearance, reaction, clot formation, cell count, and differentiation with stain, protein concentration, cultures, aerobic and anaerobic, and occasionally the icteric index.
6. Serum protein. (Depressed in hypoproteiniemic osteoporosis and frequently elevated in multiple myeloma.)
7. Bone marrow studies (to exclude leukemias, lupus erythematosus,¹² multiple myeloma, etc.)
8. Serum calcium, phosphorous, and alkaline and acid phosphatase.

9. Biopsy studies of joints, adjacent nodes, bursae and tophi. Tumors, gouty arthritis, trichiniasis along with tubercular, mycotic and other infections are often differentiated in this fashion.

SUMMARY AND CONCLUSION

The problem of the acute joint has been discussed and a plea for accurate, specific diagnosis made. The treatment, once the diagnosis has been established, is in most instances, obvious and effective.

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MENTAL HYGIENE IN THE COLLEGE HEALTH PROGRAM*

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AND

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In colleges and universities, as in many other fields of human relations, the problem of mental hygiene has become increasingly a subject of thought and interest. Some of the older universities have had psychiatric divisions in their student health services for relatively long periods of time but actually colleges have never been entirely without mental hygiene, it having existed long before the words of mental and hygiene were ever combined. Mental hygiene includes all of those things which have been done in the way of student counseling; from the days when the college president knew and personally advised with every college student, down to the present time when there are modern health and personnel departments in addition to the understanding deans. All these agencies have been practicing mental hygiene, in that all have tended to allay the fears and anxieties of the students and to resolve emotional conflicts

so that the student would be free to apply himself intellectually and efficiently to the work at hand.

Counseling is a type of mental hygiene which has proved valuable throughout the years, but the knowledge upon which the faculty counsel depended was general rather than specific and the counselors philosophy of life was quite personal. His relation to the student was, therefore, largely if not entirely subjective.

It was at this point that psychiatry may be said to have entered the field with the term mental hygiene. The psychiatrist introduces into the situation a degree of objectivity not usually encountered in counseling; with a specific knowledge of personality structure, of human motivation, and of the significance of certain attitudes, expressions, and modes of conduct which permit more rapid and complete correction. A still greater difference, perhaps is the psychiatrist's attitude toward certain qualities of personality. For example, he does not always ac-

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cord to intellect the respect usually given it in academic circles. He respects the possibilities of intellect but recognizes that it is not the supreme or final factor in good social adaptation.

The need for mental hygiene in colleges is actually quite great, though the uninitiated may believe that mental and emotional disorders in college are either rare or unimportant. Actually there are many instances of severe emotional disturbances and some cases of true mental disease.

In the administration of a student health service, physical health cannot be an end within itself. It is essential that we do not lose sight of this, for our chief contribution to the University is the maintenance of the student at a high level of physical and emotional efficiency, which will permit him to complete his college work with the greatest possible degree of success, and at the same time prepare himself for successful adjustment to life after leaving the University. This means that scholastic success and physical health are but two parts of an important triad, the third and equally important part being the student's ability to live with himself and his fellow-man.

Mental hygiene implies the prevention of emotional and mental disturbance as well as the detection, treatment, and cure thereof. While prevention is the ideal goal, complete prevention is not possible under any type of hygienic set-up and detection and treatment of disturbance and illness become important.

In the University of Oklahoma, a number of mechanisms have been set up for meeting the need for mental hygiene. These include: The Director of Student Affairs, under whom function

1. The Counsellors of Men and of Women, their respective staffs and the student advisors
2. The Faculty Advisors
3. The Student Health Service
4. The Speech Clinic
5. The Hearing Clinic
6. The Vocational Guidance Centers.

The Counsellors of Men and of Women have a group of advanced students, graduate students, and employees who act in the dual role of dormitory supervisors and counsellors. These persons receive special training and instructions from the counsellors themselves, and from the physicians of the Student Health Service. Other specially trained members of the faculty assist in orienting the student counsellor to the spe-

cial fields and factors involved so that early evidence of disorders of conduct scholasticism, health, or emotion may be detected and reported to the proper corrective agencies.

While disturbances of conduct and behavior alone might seem to fall under the administrative duties of only counsellors themselves, the Student Health Service has established a policy whereby any and all types of problems may be referred to it where, after examination and determining of the factors involved, the student may then be referred to the proper authorities within the University. This has been found to be a most admirable policy, inasmuch as students with anxiety, emotional unrest, and behavior disorders as well as those with mental or physical disease are usually willing to come voluntarily to the Student Health Service and talk to the doctor; though they may be hesitant to approach members of the faculty or of the administrative personnel whom the student fears may take some disciplinary or punitive action. Student problems demanding administrative attention are referred to the proper University official by the Student Health Service, though if a physical or mental illness is found to exist and to be playing a part in the problem, a report of these conditions is included in the referral. This permits the university administrators a complete and well oriented understanding of the students entire situation before the administrator is forced to make decisions which may be quite momentous in the life of the student involved.

Thus with the Student Health Service well oriented and alert to the emotional aspects of illness, a student with a mental or emotional disturbance is judged in the light of his total situation and his personality resources, just as though his handicap were physical. Many University students have enjoyed advantages which can accrue to them only through sustained and understanding counselling; without which they would have been forced to drop out of the University and thereby lose the time and efforts which they had already applied toward their goal.

The faculty advisors, serving as the second line of counseling in mental hygiene are primarily interested in curricular activities and in advising the student how he can best arrange his work to fulfill his academic obligations in the most profitable manner. Their advice prevents disappointments of a scholastic or academic nature

from injuring or handicapping the student. They are also concerned with the student's ability to meet his curricular requirements and some advisors extend their activities to include the emotional problems which disturb the students assigned to them. This is of course an excellent and valuable approach, though the number of students assigned to each advisor makes it difficult for the Faculty Advisors to enter into the emotional problems of all the students under his direction. These members of the faculty do serve as a source of referral, however, and many students who are having scholastic trouble are sent to the other University agencies for physical, psychiatric, or psychological examinations. These examinations frequently result in the detection of physical or emotional disorder and proper steps can be then taken for its alleviation. Close liaison between the faculty advisors and the Student Health Service has proved of value in maintaining the effective performance of the student.

The Student Health Service of the University of Oklahoma consists of a medical director, six full time physicians and 12 medical consultants covering every special field. It has a very excellent nursing staff which is especially well oriented in public health; and several of its members are trained in psychiatric nursing and mental hygiene. All the full time physicians of the Student Health Service are general medical men though each has special interests and devotes more or less of his time to the specific needs of the service, such as radiology, ear nose and throat, and psychiatry.

While many universities have a much larger psychiatric staff within the Student Health Service, every effort has been made at the University of Oklahoma to enlist all available personnel. It is hoped in the reasonably near future we may have, in addition to those members of our full time staff who have some interest in psychiatry and to our consultant in neuro-psychiatry, a full time psychiatrist.

The need for this service is great as has been evidenced by those cases demanding attention and treatment even with the rather limited personnel available at this time. Our present approach to mental hygiene is one based upon orientation of the general physician to the psychiatric problem. This is deemed of great importance, not only in the University but elsewhere, as it is the family physician and general practitioner who usually has first contact

with the patient suffering from emotional and mental disease. It is therefore necessary that all physicians be alert to detecting the psychogenic element in the diseases which they see, and in realizing that many patients who complain of physical symptoms are in fact suffering from emotional disturbances and situational maladjustments.

The great majority of such patients are handled and treated successfully by the general medical men of our staff. Those students whose cases seem more serious, or which do not respond promptly to treatment are seen by the consulting psychiatrist during his regular visits to the infirmary. Before being seen by the psychiatrist, the physician refers the patient to one of our nursing staff who in lieu of a psychiatric social worker talks with the patient, orients him to the psychiatric interview, and takes a complete social history which in its entirety comprises that part of the patient's history of special psychological significance. If in the social history or later during the interview with the psychiatrist, information is obtained which indicates the need for referral to an agency for social case work, such a referral is then made with the approval of the Director of Student Health. Frequently such a referral not only permits greater understanding of the student's problem but affords a practical solution therefore and makes recovery more complete and more permanent. This careful and well worked integration with the various social agencies in the community has proven of inestimable value to the students in the University.

The Speech and Hearing Clinics, as their names imply, offer special corrective services to handicapped students, thereby improving their social and occupational adaptability, and lessening the emotional stresses of life adjustment.

The guidance centers operated by the University and by the Veterans Administration render vocational guidance and psychological testing services to the students who come under their respective jurisdictions.

It is of interest that most of the referrals to the Psychiatric Division come from the medical staff of the Student Health Service and from the physicians and social agencies in the community where the University is located. These same groups are the chief source of referrals in other universities having psychiatric or mental hygiene services.

Specific types of problems encountered in the Mental Hygiene Clinic are reflected in the following cases taken from our files.

1. Acute psychosomatic disorders associated with anxiety tension states comprise the majority of the cases seen, and the most of these disorders are handled successfully by general physicians with Student Health Service.

Typical of this group is the physical education major who, complaining of heart pain and diarrhea, was found to be unduly apprehensive in a required course of human anatomy. Early conditioning had made this student almost compulsively modest and afraid of knowledge of the human body. Orientation to the cause of her problem resulted in immediate relief of the symptoms and associated anxiety; while tactful discussions in a medical environment permitted her to gain a more normal and stable attitude toward herself and her fellow students.

It is of greatest importance that such patients gain early insight into the origin of their physical complaints, lest the symptoms become fixed and the patient become resistively hypocondriacal.

2. Poor habit formations upon the basis of emotional disturbances form a second important group. Typical is the freshman student observed during the routine admission physical examination and who was asked if she would like to have special assistance for her severe obesity. After routine efforts at weight loss proved unsuccessful, a psychiatric interview revealed her dietary obesity to be psychogenic, and to have begun at the age of eight years. At that time the student's mother had become ill and it was necessary for our patient to live with various aunts and uncles. As she was rather thin and undernourished, she was constantly encouraged to eat and soon found by eating huge amounts of food she was able to win praise and attention. At the first interview it had been learned that she had made various attempts to lose weight but these were sporadic in nature. Her study habits followed the same pattern and while she would study diligently for several weeks, she would then find herself unable to concentrate and becoming inattentive in class. When the patient understood that her voracious appetite was in fact a substitutive effort for gaining attention and affection and was repeatedly stimulated by any threat to her security, she was enabled to replace this trait with efforts to improve her physi-

cal appearance and her social graces. As her efforts in these directions became more successful she ceased to suffer her periodic depressions and preoccupations which had made it difficult for her to diet and study. Losing 50 pounds in weight, her social as well as her scholastic adaptation was greatly improved.

3. Anxiety hysterics in need of immediate hospitalization are not infrequent. Typical of this group is a 19 year old sophomore carried into the Student Health Service by her roommates who could offer no explanation of her illness except to state that she suddenly "fell to the floor and began to scream and moan." Physical examination failed to account for her expressions of pain and the patient refused to answer questions or to respond to examination except by crying and writhing in apparent pain. She refused to talk and for 16 hours did not void or take nourishment. Under Narcosynthesis her negativism and bizarre behavior disappeared and her disorder was found to lie in psycho-sexual conflicts, which were resolved in a conventional manner with complete disappearance of symptoms. By arranging improved and supervised social activities, this patient was able to return to school after three days with permanent improvement in her ability to adjust to her life situation. Her disorder, based upon parental conflicts during which the patient had developed a pathological attachment to her mother, and an intense rivalry toward a brother one year her senior, had produced bizarre attitudes toward her schoolmates resulting in the acute hysterical episode described above.

4. Severe neuroses, chronically disabling in nature also occur, typical of which is the senior engineering student suffering from a compulsive phobic reaction involving numerous sexual phantasies and who came to the Infirmary complaining only of painful urination. It was found that this man, an honor student in the University, had gradually become afraid to make any decisions affecting himself or those about him. He was unable to deliver papers which he had prepared for his engineering seminar or to accept any one of several good positions which had been offered him by oil companies upon his pending graduation. His disorder had become exceedingly handicapping and had it not been for his previous excellent scholastic record, his graduation itself would have been threatened. Failing at first to respond to psychotherapy, because of se-

vere emotional block associated with imaginary sexual guilt, two electric shock treatments followed by further psychotherapy proved quite successful. This student completed his University work with honors and has since made a successful occupational and marital adjustment.

5. Major psychoses are also seen, typical of which was the graduate student, a captain in World War II, who was brought to the hospital suffering an acute panic reaction with frank hallucinations in the auditory field. Deep sedation followed by the gradual institution of psychotherapy relieved his homosexual conflicts and permitted a remission in his psychosis. After three weeks of hospitalization the patient was enabled to return to school and obtain his masters degree.

Fortunately less frequent are the severe psychoses typified by the student who was brought to the Student Health Service by his fraternity brothers who had observed his actions were queer and bizarre and felt him to be in need of medical assistance. This patient had begun to talk about religion and had developed a belief that he was Jesus Christ or other biblical characters. After first improving upon electric shock treatment, he suffered a relapse with the development of many bizarre somatic de-

lusions and suicidal ideas. His transfer to a mental hospital became necessary, where his return to the University was made possible a few weeks later by more adequate and intensive therapy.

It thus becomes obvious that one of the chief goals of the Student Health Service is to alleviate the emotional as well as the physical handicaps of the University student thereby increasing his efficiency and ability to adapt to his University situation. Prevention, diagnosis, and treatment of disease processes are inseparable and it becomes mandatory that an adequate health service be interested in all three fields of endeavor.

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MEDICAL SOCIETIES AROUND THE STATE

KAY-NOBLE

Members of the Kay Noble Medical Society met in Perry for their November meeting with Dr. Henry B. Streng of Oklahoma City as principal speaker. He spoke on "Respiratory Infections in Childhood."

CRAIG-OTTAWA

Members of the Craig and Ottawa county societies met during November at the Vinita country club for a dinner and business session with scientific program.

OKLAHOMA

Paul Hawley, M.D., executive director of the Blue Cross-Blue Shield Commission was guest speaker at the November meeting of the Oklahoma County Medical Association. Dr. Hawley was formerly chief surgeon of the Veterans Administration.

BECKHAM-CUSTER

Beckham County Medical Society members were guests of Custer County Medical Society Medical Society members at a dinner meeting in Clinton November 9. Additional guests were John Hart, executive office representative, and J. R. B. Branch, M. D., post-graduate instructor.

CARTER COUNTY

Presentation of Fifty Year Pins was made at the Carter County Society meeting in November. Dick Graham, O.S.M.A. executive secretary, and Larry Rember of the A.M.A. Council on Medical Service attended the meeting. Details and biographical material on the fifty year pin presentations can be found elsewhere in the Journal.

ACUTE INFECTIONS OF THE HAND*

RAY H. LINDSEY, M.D.

PAULS VALLEY, OKLA.

Too often little attention is given to the onset and early symptoms of infection of the hand. Too often treatment is given only when patient demands bring the seriousness of it to our attention, and too often that treatment is inadequate, hastily given, and after care delegated to one not informed of the dangers and frequency of complications. Penicillin and sulfa drugs have aided immeasurably in the control of most surgical infections, but they are not the final answer. This paper is to review, not add to, your knowledge of such infections with the hope that more interest will be taken in this acute surgical emergency.

Acute infections of the hand may, for practical purposes, be classified as minor:

1. Felon
2. Paronychia
3. Carbuncle
4. Collar Button or Web Space infection,

and major:

1. Purulent tenosynovitis
2. Infection in fascial spaces
 - a. Thenar
 - b. Mid palmar
3. Lymphangitis.

Combinations of minor infections do occur when treatment is delayed, and a review of some of the anatomical peculiarities of the hand will give reason for the combination as well as guide us to the proper and adequate treatment of them.

The Felon occurs in the anterior closed space of the finger tips. This infection enters through a scratch or perforation, and is guided toward the distal phalanx by a peculiar wheel spoke arrangement of fibrous cords and interspersed layers of fat and glands all leading centrally. It is confined usually to the distal phalanx, and its progress is marked by relatively early periostitis and osteomyelitis. It's drainage is by lateral incision which breaks up these fibrous cords by cross section.

Paronychia is an infection at the lateral edge of the nail which tends early to burrow under the nail and circumvent it at the

base. It's treatment requires incision of the infected area as well as elevation of the nail base to uncover pus which may not be clinically evident.

Carbuncles are usually situated on the dorsum in hair bearing areas, and are best treated by crucial incisions early to prevent great tissue loss in their later stages.

Web space infections occur usually under a palmar callus with the formation of pus, then they penetrate the palmar fascia into the web space where spread is both rapid and apparently uninhibited. Their drainage at times requires counter drainage into the web of the fingers: always it should include exploration for this frequent and very probable route of spread.

Of the major infections of the hand, acute purulent tenosynovitis is probably the most frequent, and in early stages the easiest to diagnose, yet most often overlooked or not considered serious until complications occur or pain and toxemia require a change of treatment. All five fingers have enveloping their flexor tendons a strong sheath—the first following the tendon into the wrist as the radial bursa—the fifth following the tendon into the wrist as ulnar bursa—the second, third and fourth ending just proximal to the metacarpo-phalangeal joints. Infection in these sheaths all tend to arise soon after the initiating trauma whether penetrating or not, they tend to progress rapidly and present symptoms of pain and immobility, and all have two characteristics on examination—pressure pain over the sheath involved, and acute pain on extension of the finger. We must guard against the feeling that infections of the sheaths of the thumb and little finger are relatively less acute and less serious, because they extend into the bursae very soon. Hence all tendon sheath infections should be carefully assayed for possible palmar spread.

The fascial space infections are generally secondary to spread from tendon sheaths of the second, third and fourth fingers, web space infections or rupture of one of the bursae into the adjoining space. There are two important fascial spaces in the palm—the thenar and the mid palmar. Both lie

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

between the interosseous muscles and the deep flexor tendons—the thenar over the second and part of the third metacarpal, the palmar from the lateral side of the third metacarpal to the metacarpal of the fifth finger. They are potential spaces and separated by a strong mid palmar septum which tends to isolate infections from the two sides of the palm.

Lymphangitis of the hand tends at times to be one of the most formidable of hand infections. Rapid in its spread as its name implies, prone to ascend up the arm via the lymphatics, and a common accompaniment of the acute infections make it one of the most dreaded of hand infections. As the lymphatics drain from the volar to the dorsum of the fingers and course up the forearm along the main venous channels, so does the rapid edema, angry red streaking and pain of lymphangitis warn us of the serious nature of this complication. At times it will be the only finding and no local accumulation of pus can be found as its source.

Before we discuss treatment of the major infections let us review a few of the anatomical features of the hand on which our treatment will be based. I have mentioned the anterior closed space of a felon, the tendon sheaths and the radial and ulnar bursae. Knowing the location of pus in the hand, we must know where to incise for drainage or see the consequence of post

operative hemorrhage, anesthesia from traussected nerves or spread of infection from inadequate drainage.

The arterial supply of the hand most endangered in incisions for acute infections arises from the superficial palmar arch of the ulnar artery. It lies in an arch under the palmar fascia and mainly proximal to the second flexion crease of the palm. The arch gives two digital branches to each of the fingers except thumb and index finger, the former supplied by the deep arch of the radial artery and the thenar side of the index finger by the same. These digital arteries course up the distal part of the palm, lateral to the flexor tendons and lie in cross section just at the volar end of the flexion creases in the fingers. This point gives us two points of safety—tendon sheaths should be incised just to the edges of the flexion creases which will give also ample protection to the digital branches of ulnar and median nerves which lie to the volar side in apposition to the digital arteries. The absence of a radial digital branch of the arch for the index finger affords us a safe area for incising a tendon sheath infection of that finger.

Since the thenar space lies on the adductor pollicis and behind the apponeus pollicis muscles, ready access to this space is found through the dorsal surface of the thenar web just at the edge of the adductor pollicis.

TWENTY-FIVE YEARS AGO

(from our early files of Editorial Notes—Personal and General)

Dr. T. Fuller, Vanosa, has moved to Oklahoma City.

Dr. D. B. Ensor, Hopetown, returned from a six weeks' visit in Tennessee, Virginia, and Washington, D. C.

Dr. J. T. Frizzel, Clinton, has been appointed city health officer. Dr. Frizzel has recently moved to Clinton from Butler.

Dr. R. B. Hayes, Guymon, and Miss Della Wilson were married at Liberal, Oklahoma, on November 20,

and are taking a short honeymoon trip to Hutchinson and Wichita.

Dr. J. E. Harbison, Oklahoma City, is reported to head a group of physicians who are negotiating for the purchase of the Baptist Hospital there, to be continued as a hospital.

Dr. Ellis Moore, Oklahoma City, has returned from special interne and post graduate work at the Brady Institute, Johns Hopkins Hospital, under Dr. Hugh Young, and while there also assisted Dr. Geraghty in his office. Dr. Moore has been associated with Dr. W. J. Wallace for more than two years, and they have since formed a partnership.

CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Medicine*

HOWARD C. HOPPS, M.D. AND VERN H. MUSICK, M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HOPPS: The case for our consideration this morning presents a very difficult diagnostic problem. We have not withheld any data from the protocol and since Doctor Musick has no information other than that which has been furnished to you in mimeographed form, the basis for his discussion and diagnosis will be the same as yours. I realize that this places Doctor Musick under considerable handicap, but the facts were as they have been stated here, and this woman entering the hospital in a disoriented state and in a terminal condition was not able to give more information than we have furnished. Doctor Musick, will you make the best of this that you can?

PROTOCOL

Patient: E. D., 59-year-old negro female. Admitted November 29, 1947. Died December 2, 1947.

This patient was stuporous when first seen at University Hospitals. She continued so, finally progressing into coma, and therefore was never able to relate her history in a completely coherent manner.

Present Illness: Five different doctors elicited this patient's history. Four of them recorded that, on November 23, 1947, she developed sudden severe pain in the right lower quadrant of the abdomen, which pain later spread to the right upper quadrant. The fifth historian recorded that the pain originated in the epigastrium and several days later radiated into the right lower quadrant. It seems definite that her pain was predominately right sided and that at times was generalized throughout the abdomen. The onset of pain was soon followed by nausea and repeated vomiting that day and the next day (five or six times in all). The vomitus resembled food she had eaten and was not bloody. The severe pain continued. There were no bowel movements until November 28, 1947 at which time she passed a small amount of liquid stool and gas. A doctor gave her two hypodermic in-

jections and prescribed salts and a liquid diet. She was admitted to U. H. the following day (November 29, 1947).

Past History: There had been no previous attacks of this nature. She had had no operations. She was a para X gravida XII. For the past three or four years she had had severe headaches, dizziness, and a "crazy feeling" in her head. She was told by her physician that she had high blood pressure. For some time preceding the P. I. she had had frequency of urination.

Physical Examination: She was obese, acutely ill, and dyspneic. Temperature was 99° F; pulse 85; respirations 35; blood pressure 120/75. The sclerae were slightly icteric. The lung fields were resonant and vesicular; breath sounds were present. There were no rales. The heart tones were clear; there were no murmurs; rhythm was regular. There was marked generalized abdominal tenderness, with marked rebound tenderness, but no contralateral tenderness. There was muscular rigidity of the lower abdominal wall. Bowel sounds were diminished. Rectal examination revealed generalized tenderness, but was otherwise negative. Pelvic examination revealed generalized tenderness, but was otherwise not remarkable. Breath was described as "acidotic-uremic?"

Laboratory Data: A flat plate of the abdomen was interpreted as follows: "The kidneys are not well visualized. There are no gallstones noted. No evidence of intestinal obstruction. Several calcifications in the course of the right ureter, which should be ruled out by further studies." Urinalysis disclosed: pH 5.0, specific gravity 1.014, protein 1+, no glucose, no red cells, very rare white cells, no casts. Test for bile pigments was negative. Hb. was 11.0 Gm. percent, RBC's 3.49 million/cu.mm. and WBC's 16.7 thousand cu. mm. with 89 percent neutrophils, 9 percent lymphocytes, and 2 percent monocytes. B. U. N. was 60 mg. percent, icteric index 20. — positive Van Den

Bergh — Quantitative Van Den Bergh 3.5 mg. percent.

Clinical Course: Fever ranged around 100° F. most of the time. The first 48 hours in the hospital the patient voided 300 cc. of urine, and the urinary output did not increase appreciably despite generous fluid therapy. She was given 100,000 units penicillin I. M. q three hours. Wangensteen suction was employed several different times. Sulfadiazene and sulfathiazol were given parenterally. Morphine was given for pain relief. Oxygen was administered by nasal catheter. Despite these and additional supportive measures the patient expired on December 2, 1947.

CLINICAL DIAGNOSIS

DOCTOR MUSICK: This history appears to be almost devoid of any accurate information, but it does illustrate one point — that the history is the most important part of any examination. Devoid of a good history we are robbed of our major opportunity to make an accurate diagnosis. We do know that the patient had a pain in the right abdomen, but whether in the upper or the lower portion we do not know. Furthermore, we have no idea how much pain the patient had. Without this additional information, the mere fact that pain was experienced loses most of its significance. Despite all this, the case is a fair diagnostic problem since we often encounter patients of this sort. They come in unconscious and there they are. One has to do the best with what is available.

We do know this — we do know that the patient had uremia. The question however is whether the uremia was of renal origin or whether it was prerenal azotemia. We know too that the patient had jaundice, but again we do not know whether the jaundice was hepatocellular (retention type) or obstructive (regurgitation type). It seems too that she had intestinal obstruction, but was the obstruction due to paralytic ileus or some mechanical factor? I think our diagnosis of this case will rest upon the answer to these three questions.

There are several lesions in the upper abdomen which I will consider, but I will tell you frankly at this point, I do not believe that I will make an accurate diagnosis on this patient. Was this a case of *acute yellow atrophy* of the liver? Usually one does not have pain with acute yellow atrophy. Another point against this is the blood urea nitrogen of 60. Since the conversion of

more complex nitrogenous products to urea is a function of the liver, marked hepatic deficiency as occurs in acute yellow atrophy usually leads to subnormal blood urea levels. Furthermore, if the patient had had acute yellow atrophy, as sick as she was, there should have been evidence of hypoprothrombinemia and hemorrhage. This was not present. In this connection, we would like to have information regarding blood glucose levels, but this test apparently was not done. Did this patient have a *ruptured peptic ulcer*? She was a 59 year old female. Usually we see peptic ulcers in younger individuals, and much more often in males. Especially is this true of perforated peptic ulcer which is 25 times more common in males. These facts do not exclude the possibility of perforated peptic ulcer however. The lack of abdominal rigidity or localized tenderness argue somewhat against ruptured peptic ulcer. Jaundice might be explained in the case of ruptured peptic ulcer, if one considered it to be hepatocellular in type — from absorption of toxic materials. Did she have a *ruptured gallbladder*? This can occur suddenly and oftentimes it is accompanied by jaundice. It is more apt to occur in obese individuals and in the sixth decade of life. The right-sided pain and right-sided tenderness would also fit with this. Reasoning along these lines the increase in urea nitrogen might be on the basis of prerenal azotemia from dehydration with an element of renal insufficiency on a toxic basis. There is no history here which would lead us to believe that the patient had had previous attacks of cholecystitis, but in cases of ruptured gallbladder approximately 50 per cent of the individuals give no history of previous gallbladder disease. Against this diagnosis is the rarity of the condition. The fourth possibility to consider is acute edematous pancreatitis progressing to the stage of *pancreatic necrosis*. This too could account for the jaundice, uremia and other factors that we mentioned. Against this is the slow pulse and absence of abdominal rigidity. *Mesenteric thrombosis* must be considered also. This occurs in middle or late life and is often associated with cardiovascular disease. You will recall that the patient was once told she had hypertension. In mesenteric thrombosis abdominal tenderness is often generalized, but it is sometimes localized to the right side. As a rule pain is less severe than in the case of ruptured peptic ulcer and may subside as gangrene supervenes. Vomiting, fever and a

rapid weak pulse are characteristic of this condition. We keep getting back to the fact that this patient had a slow pulse, and that is very difficult to explain in view of the other signs and symptoms. Perhaps if we had information as to the quality of the pulse it would help. I interpret the leukocytosis of 16,500 as additional evidence in support of the diagnosis of peritonitis. This helps very little, however, in determining which of the conditions I have discussed was operating. We would have to consider *ruptured appendix* as a possible source of the peritonitis since about 75 per cent of all abdominal catastrophies are caused by ruptured appendix. I have never seen a case of ruptured appendicitis in which jaundice developed so shortly after the initial symptoms. Jaundice may develop later, but not within this period of time. Largely on the basis of this I am going to dismiss ruptured appendix as a major item of differential diagnosis in this case. The x-ray department observed shadows which they interpreted as possible renal calculi and asked that further studies be made. This we cannot ignore. It seems unlikely to me that the patient's complaints could have been a direct effect of ureteral calculi. It does bring up the possibility of a parathyroid adenoma, however. This could account for uremia, but it would be difficult to account for the pain, jaundice and the terminal acute episode on this basis. As other more or less remote possibilities, we must consider *poisoning by mercury, bismuth or arsenic* since all of these could lead to such a picture. Usually they would not produce the degree of pain experienced here, but such is possible. With the small amount of information at our disposal, and with the multiple diagnostic possibilities which I have mentioned, you can see that it is very difficult to arrive at the correct one unless by chance. We will do the best we can simply on the basis of logic with the realization that logic frequently fails in cases of this sort.

In summary, I am influenced by the suggestion that this patient had cardiovascular disease, (based on the simple statement that she was thought to have had hypertension) to consider progressively increasing nephrosclerosis, progressive hypertension associated with increasing changes in blood vessels, finally terminating in mesenteric thrombosis. This would explain the acute right-sided pain, nausea, vomiting and obstipation with gangrene of the bowel as

a cause of peritonitis. All of this could produce renal dysfunction on a toxic basis and in addition, dehydration with "deviation" of water from the kidneys (extra-renal azotemia). Finally, on this same basis of toxemia from peritonitis, one could expect hepatic damage which might manifest itself as slight jaundice. As other possibilities, and in this order of frequency, I consider ruptured gallbladder, acute pancreatitis and ruptured peptic ulcer. None of these can be excluded from the information at hand.

CLINICAL DISCUSSION

QUESTION: What about the possibility of Weil's disease?

DOCTOR MUSICK: Weil's disease is ordinarily characterized by a higher degree of fever and does not usually produce the degree of shock that this patient exhibited.

QUESTION: If the patient had peritonitis, how do you explain the low fever and the slow pulse throughout the course?

DOCTOR MUSICK: I am unable to account for this. An overwhelming infection might explain the slight fever, but I don't understand how even that could account for the slow pulse rate.

QUESTION: Should infectious hepatitis be considered?

DOCTOR MUSICK: Yes, and I was thinking of this in my initial discussion to acute yellow atrophy. If infectious hepatitis terminates fatally in the acute stage, the picture is that of acute yellow atrophy.

QUESTION: Did you consider pylethrombophlebitis?

DOCTOR MUSICK: Yes, I think this would have to be considered, possibly secondary to periappendicitis or diverticulitis.

ANATOMIC DIAGNOSIS

DOCTOR HOPPS: When we examined this patient at necropsy the jaundice was slightly more intense than had been indicated on the chart. Upon opening the peritoneal cavity we found the entire abdominal viscera to be overlayed with fibrinopurulent exudate so that the patient did have peritonitis. This was most abundant in the upper right quadrant and there especially, the omentum was thickened and densely adherent to the underlying viscera. The region of maximum involvement seemed to center about the gallbladder. The appendix was not involved in these adhesions and lay completely free, thus excluding it as a possible source of the peritonitis. There was a large subdiaphragmatic abscess on the right which

measured 20 cm. in greatest diameter. It involved almost the entire diaphragmatic surface of the right lobe of the liver. Although the inflammatory process had affected the diaphragm so extensively as to give fibrinous adhesions at the base of the right lung, it had not yet led to an empyema of the right pleural cavity. The source of the peritonitis and subdiaphragmatic abscess was a rent in the gallbladder approximately 1.5 cm. in length. The gallbladder measured 12.5 x 6 cm. and was moderately tense. It was densely incorporated within fibrinous and fibrous adhesions which bound it to the surrounding tissues. It was filled with numerous faceted and round concretions. One such concretion was found lying free in the pelvic cavity. The wall of the gallbladder was moderately thickened and discolored dark reddish-brown. The mucosal surface was covered by a red-gray fibrinopurulent exudate. The point of perforation was near the neck on the anterolateral aspect, adjacent to the free border of the liver. The cystic duct was dilated to a diameter of 2 cm. Approximately 2 cm. proximal to its junction with the neck of the gallbladder there were impacted five faceted stones. These completely obstructed the cystic duct and accounted for the fact that there was very little bile free in the peritoneal cavity. The peritonitis was thus largely on an infectious basis. The obstruction of the cystic duct must have been fairly recent because the gallbladder was not dilated nor had all the bile pigment disappeared.

Turning our attention to other organs, we found the kidneys to be swollen, tense and moderately increased in size. The capsule stripped easily indicating that there had been no fibrotic process obliterating glomeruli and fixing the capsule to the parenchyma by fibrous bands. There was no evidence of obstruction to the urinary tract and no calculi were present. The opacities referred to by the roentgenologist were probably phleboliths. The basis for this patient's progressive oliguria and uremia was not determined from the gross changes alone; it was apparent only after histologic studies. The heart was moderately enlarged, weighing 400 gm. The hypertrophy was most marked in the left ventricle and, in the absence of valvular lesion, was almost certainly an effect of increased blood pressure. Further evidence of hypertensive disease was found in the hyperplastic arteriosclerosis observed in arterioles of

various tissues. The lungs were moderately increased in weight and presented areas of slight nodular induration suggesting bronchopneumonia. The liver weighed 1750 grams, approximately 300 grams more than normal. It was swollen, its capsule was tense and the parenchyma was light yellow, — gross evidence of toxic damage. Histologically, in addition to parenchymatous degeneration, there were numerous foci of suppurative cholangitis with acute pericholangitis. These changes are sufficient to explain the patient's jaundice on a hepatocellular basis.

So far then we have explained the patient's peritonitis and seen some of its effects in the form of toxic changes and paralytic ileus. Jaundice has been accounted for on the basis of cholangitis and pericholangitis, along with parenchymatous degeneration. Uremia yet remains to be explained. Histopathologic studies revealed marked changes in the kidney which involved principally the convoluted tubules. Many of these contained orange-brown coarsely granular casts resembling precipitated hemoglobin or myoglobin. There was marked parenchymatous degeneration which in some areas had progressed to frank necrosis. This together with interstitial edema and congestion are characteristic of *lower nephron nephrosis*.

Baldwin Lucke in 1946 reported an extensive study of cases of this sort in which there developed a syndrome characterized by oliguria (or anuria), heme pigment excretion, azotemia, hypertension and uremia. It was found to occur in a variety of conditions associated with destruction of tissue, especially muscle, or intravascular hemolysis. It may also occur in extensive infectious processes (as represented by this case), crushing injury and other forms of trauma to muscle (crush syndrome) burns, transfusion with incompatible blood, heat stroke and from various poisons. The recent studies of Trueta, Barclay et al, tend to clarify the pathogenesis of the renal lesion and suggest that the obstruction of convoluted tubules by casts is a minor factor in comparison to alteration in blood supply to the cortical portion of the kidney. This results in ischemia and profound degenerative changes which may progress to necrosis. It is this decrease in blood supply, "medullary shunt," which is primarily responsible for the oliguria, uremia, etc. I have discussed this aspect of the case at some length because it illustrates some of the less obvious

mechanisms which may be set in motion by extensive severe infections (and many other types of profound insult). Although uremia in this case played a minor part in causation of death, lower nephron nephrosis as such carries a high mortality and may be the lethal complication of what would otherwise be of relatively minor importance.

Our final anatomic diagnosis is:

Cholecystitis, suppurative, with cholelithias (numerous pigment stones), and obstruction of the cystic duct by five pigment stones

Generalized peritonitis, and subdiaphragmatic abscess, right, secondary to rupture of the gallbladder (bile and infectious organisms)

Fibrinous pleuritis, right, with hydrothorax, bilateral

Icterus, slight

Suppurative cholangitis and pericholangitis with marked parenchymatous degeneration of liver

Lower nephron nephrosis, marked (hemoglobin or myoglobin obstructive nephropathy?)

Arteriosclerotic heart disease characterized by marked atherosclerosis of coronary arteries with diffuse and patchy interstitial myofibrosis

Acute passive congestion of viscera

Hypostatic pneumonia, bilateral, slight

Cardiac hypertrophy and hyperplastic sclerosis of small arteries, including arteriolonephrosclerosis, slight, compatible with hypertension

Infarct (early) of spleen

Adipose infiltration of right ventricle of heart

Atrophy of pancreas

Congenital anomalies of upper urinary tract: Double right ureter, proximal 4 cm. Right renal artery arises immediately above the bifurcation of the aorta.

MEET OUR CONTRIBUTORS

Jack R. Ewalt, M.D., a guest speaker at the Annual Meeting, wrote "Responsibilities of the General Practitioner for the Care of the Psychiatric Patient" in this issue of the Journal. He was graduated from the University of Colorado in 1933 and his specialty is psychiatry. He is a member of the American Psychiatric Association and the Central Neuropsychiatric Association and has been certified by the American Board of Neurology and Psychiatry. Dr. Ewalt is now with the School of Medicine of the University of Texas at Galveston and the Galveston Psychiatric Hospital but previously was with the Colorado Psychopathic Hospital at Denver.

Ray H. Lindsey, M.D., F.A.C.S., F.I.C.S., Pauls Valley, is the author of "Acute Infections of the Hand." He was graduated in 1929 from the Northwestern University Medical School and limits his practice to general surgery. He is a member of the American Society of Hand Surgeons and has been certified by the American Board of Surgery. He served in the medical corps during World War II.

William K. Ishmael, M.D., F.A.C.P., Oklahoma City, has a scientific paper on "The Acute Joint" in this Journal. He was graduated from the University of Oklahoma School of Medicine in 1935 and specializes in rheumatic diseases. He is a member of the American Rheumatism Association and the Oklahoma Rheuma-

tism Society. He has been certified by the American Board of Internal Medicine. Dr. Ishmael was also in the army during World War II.

L. F. Shryock, M. D., Enid, is the author of "Pulmonary Complications in Hodgkin's Disease and Their Treatment." He was graduated from Northwestern State Teachers College and the University of Oklahoma School of Medicine in 1940. He interned at University Hospital, Oklahoma City and before moving to Enid was with the Creek County Health Department. Specializing in radiology, he was a resident in radiology at University Hospital, Oklahoma City.

Moorman Prosser, M.D., Oklahoma City, and *James O. Hood, M.D.*, Norman, are joint authors of "Mental Hygiene in the College Health Program." Dr. Prosser was graduated from the University of Oklahoma School of Medicine in 1935 and specializes in neuro-psychiatry. He was certified by the American Board of Psychiatry and Neurology in Psychiatry in 1943 and was formerly the clinical director of the Central State Hospital at Norman.

Dr. Hood also attended the University of Oklahoma School of Medicine, graduating in 1931. He specializes in public health and is a member of the Southern Medical Association, American Academy of General Practice, and American Public Health Association. He is a delegate from the Cleveland County Medical Society.

Special

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J.

The opportunity of appearing before the members of the Medical Assistants Society of Oklahoma in their first annual meeting is one of which I am particularly appreciative. Like all doctors, I have long recognized that much of the success we attain in the practice of medicine is due to the efficiency and loyalty of our assistants — those patient ladies who must contend with the multitude of daily details, who appease the annoyed patient who is kept waiting beyond his appointment, who by their kindness and gracious manners add an appreciative human touch to the doctor-patient relationship, who perform their duties without complaint and with an intelligent efficiency, and, most of all, who seem particularly suited to bear up under the changing temperament of the doctor. I realize that in our offices we are often guilty of failing to express our appreciation to you, and yet, like all good medical assistants, you are aware of our dependence upon you, and that awareness is in itself a measure of the doctor's tribute to your good offices and loyal services. So, in coming before you, may I say a simple "Thanks" to deeply express our appreciation of what you have done for us in the past, and for what you will do for us in the future.

I have noted in a quarter of a century of medical practice that doctors' assistants, those who make a career of being a successful assistant, are persons of character and responsibility. You will admit that being an assistant to a successful and busy doctor is not an easy job. The hours themselves are often long. There are the constant contacts with a stream of sick persons, many of whom are dispirited and consequently of discouraging effect. The duties of the assistant are so widely varied, especially in the small office where a single assistant must often be receptionist, telephone clerk, medical stenographer, bookkeeper, collector of good, bad, and indifferent bills, nurse, trouble-shooter, arbitrator, errand boy, housekeeper, and father confessor to many a patient, and be it admitted, often to the doctor. On reflection, it is something of a surprise that we doctors ever find those valuable assistants who are willing to complicate their lives with such an exacting job. To me the entire keynote is tied up in one word, loyalty, and I believe it is that loyalty which is responsible for the splendid work you do for us. Loyalty, and the pride in doing her job well. When those corner-stone characteristics are present, the medical assistant will nine times out of 10 be that valuable person so indispensable to the medical profession.

I believe a very good example of your loyalty is embodied in the organization of the Medical Assistants Society of Oklahoma. To give of your time and effort

to promote and participate in such an organization illustrates your desire to attain the highest degree of efficiency in your duties and to better yourself through the mutual exchange of ideas and information. The net result of this must inevitably be better managed offices that will improve the general quality of medicine, and most important, elevate the personal relationship of the doctor and patient.

The President of the organization has given me a copy of the objectives and the Creed of the Medical Assistants Society of Oklahoma. It is a simple, yet an expressive statement of what you are striving to do. The doctor cannot help but be impressed by this Creed, and perhaps more than a little touched by the expressions of loyalty and respect which he finds there. There is first the expression of a goal of self-betterment, perhaps a selfish motive in one sense, but one which is indispensable to any profession. "I strive always to become more efficient." Second, there is evidence that you are anxious to be corrected in any way that will better your services. "I am ready to give as well as to take," and doesn't this imply, too, that you have a mutual obligation to assist your doctor to correct his shortcomings, whatever they may be? A third principle of your creed reads, "I will cooperate universally for the welfare of our patients," of which I want to speak at greater length later, and what I consider to be one of the salient points in your objective goals. "I am loyal to my doctor in thought, word, and deed," a wonderful heart-warming expression. That part of the creed which reads, "I am true to myself, my associates, and my God," is an integral part of the creed of any upright person and applicable in any walk of life. Finally, the closing expression of your creed, "I maintain always: Ethics, Faith, Courage, and Kindness." This is a summation of the basic principles of your organization and I think they might well be considered by you as the corner-stones upon which the Medical Assistants Society of Oklahoma is to be built. With that type of solid foundation, you may build steadily to your reputation and character.

I am hopeful, too, that this organization will not content itself with the mere formality of an annual meeting or permit this enthusiasm or sincerity of purpose to die. There are tremendous opportunities here for real service, both to yourselves and to the doctor and his patient. With the growing perfection of this organization, you should be in a position to render greater services and to reach towards new goals of endeavor. It is my suggestion to every young organization that it select a project of positive proportions, a definite specific project which will show a material accomplishment when completed. The unity of the organi-

*Presented before the Medical Assistants Society of Oklahoma at their first annual meeting in October, 1948.

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zation in working together in the accomplishment of such a project will do much towards the solidification and permanency of your organization. It matters not what your project is, so long as it is representative of your ideals and will have a material benefit when completed.

A few moments ago I spoke of the doctor-patient relationship, and I would like to return to that subject for a few moments for the particular purpose of impressing upon you your own important position in that relationship. As you know, the medical profession is in one of the most critical stages in its centuries — so narrow minded as to deny that most of this criticism is just, that the medical profession has been negligent in its responsibilities in many respects. It is, in large measure, the penalty which we are paying for having followed an outmoded policy of conservatism, and for having relied too much upon the reputation of those fine doctors who have preceded us. We have often not realized that we must maintain and build to that reputation, that in failing to do so, the ancient pillars tumble and throw us into the waters of disrepute.

The present criticism of the medical profession has been in large measure engineered by politically ambitious government job-holders and by politicians who have made political capital out of the shortcomings and deficiencies of our present medical system. The agitation for a tax-supported system of state medicine has been widespread, and its major point of attack has been against the doctors, who have been reviled for their omissions with no reference to the phenomenal progress and accomplishments of medicine under a system of free enterprise in the last one hundred years. Then, too, natural economic factors have operated to the disadvantage of medical care, the disproportionate distribution of hospitals and doctors, creating a shortage in one area and an excess in another. Finally, however, we come to the heart of the criticism, the patient often complains that the intimate personal relationship with the doctor is gone. In its place an impersonal attitude is alleged to have developed, and the criticism is heard that too little time is given the individual patient. The old cry of "assembly-line medicine" is being heard.

Not all doctors are offenders, but the plain truth is that most of us are too concerned with the scientific aspects of medicine to give the public relations factor its due importance. We offend, perhaps, without meaning to. Many of us are still carrying a schedule of practice comparable to the rushed days of the war, when a third of our number were overseas with the armed forces. We possibly retain some of these habits

of practice which marked the war years. Fortunately, medicine is now aware of these personal shortcomings, and of the deficiencies of medical care in many respects. Positive measures are being taken to correct these abuses.

As medical assistants, you can play a vital part in this unified effort of the medical profession to improve the doctor-patient relationship, and often at the cost of only a smile, a word of encouragement, courtesy and fair-dealing with the patient at all times. We doctors are asking for your continued help, confident that it shall continue to be extended.

Each of us has a definite stake in the fight against state medicine. 'This is just as true as though none of us were members of, or connected with the medical profession. As citizens of the last stronghold of Democracy, these United States, we are now engaged in a fight against "isms" and those forms of government whose ideals are contrary to the four freedoms. State medicine is a violation of freedom of enterprise. It bears with it the sickly taint of a rotten system which would enslave and shackle industry and the professions to the wheel of socialization. It is as foreign to our way of life and the principles of Democracy as are the fearful beliefs of Communism. State medicine is but the first step, the vital first step, in the master plan to make us all servile dependents of the government. It will be a disastrous and costly experiment if placed into operation. I can tell you now that we doctors will never agree to it, will never voluntarily participate in it, and if forced into state medicine against our will we shall see the system sabotaged in short order.

The point which I want to make is that we again rely upon you for help, for the assistance which you, as an integral part of medicine, can give in the preservation of American Ideals. I am assured that we shall continue to receive that help with the same loyalty which has always marked your devotion to the cause of medicine.

In closing my remarks, may I again express the wholehearted cooperation of the medical profession with the Medical Assistants Society of Oklahoma in attaining its goals. We are in solid support and sympathy with your objectives and program of activity, and it is our desire to repay you in some way for your tremendous contribution to the success of medicine in this State. Those of you who initiated this group, and who are and will be its leaders, are to be commended, and above all, assured that you are taking a course which will result in great personal benefit to you and a general all-around improvement in the quality of medical care.

President's Page

1949 bids to be a fateful year in world history. Mankind's attitude toward mankind will be sorely tested and tried. World peace and the changing philosophies in our own country will tax the statesmanship and clear thinking of our keenest minds.

It has been said that we are living in an atomic age but more particularly do I believe that we are living in an age where the formula of the Golden Rule is more applicable than the physicists' theories of world conquest in the scientific field.

While many of us will not be permitted to engage in the conferences concerning national and world wide problems, we do nevertheless, have our own responsibilities in our local communities and in our state. The Oklahoma legislature will be in session by the time this message reaches you. Each of us must be alert to the problems of medical care that will be studied by the legislature and to do our individual bit in presenting fairly the facts to our individual representatives in the legislature. It is my firm conviction that the members of the legislature and the national Congress value recommendations when given on a factual and impartial basis.

The problems of your State Medical Association will be increased during the history making year of 1949 and if your officers are to succeed they must have your continued cooperation.

P. S. Since writing the above the unprecedented action of the A. M. A. in levying dues of \$25.00 for the year 1949 on every active member of the A. M. A. prompts me to urge you to read the news of the A. M. A. interim session on page 30.



President.



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GENERAL NEWS

A. M. A. ADOPTS PUBLIC RELATIONS PLAN

BLUE CROSS-BLUE SHIELD MERGER DEFEATED

The A. M. A. through action of its House of Delegates at the Interim Session in St. Louis, November 30 to December 3, adopted plans for a national relations and educational program. The program will be financed by an assessment of \$25.00 on every active member of the A.M.A. for the year 1949. This action was taken in accordance with the recommendations of the board of trustees. The board recommended that funds be raised to provide, in general, for a greatly increased expansion of the present public relations program of the Association. The development of a program of education for the general public designed to emphasize the advantages to the health of the people which are available under the present system of the practice of medicine was included in the recommendations and action.

The Washington office of the A.M.A. will be enlarged and the scope of its activities considerably widened. The resolution as passed by the House of Delegates did not outline the details of this program nor did it specify the manner by which the \$25.00 assessment should be collected. These were considered as administrative problems to be handled by the board of trustees. Reports from A.M.A. indicate that the collection of the newly levied dues will be the responsibility of the state associations. The officers of the County Societies will be informed as soon as the plans are completed and information is available.

At the request of the board of trustees a committee of seven members, four from the board and three from the house, was appointed for the purpose of developing the recommended educational and public relations program and guiding its progress. It was brought out on the floor of the House of Delegates that the success of this program cannot be assured by the mere raising of funds will require renewed and increased efforts on the part of every county medical society and its individual members.

Blue Cross-Blue Shield Merger

After long and careful consideration by the special reference committee appointed for consideration of the nationalization of Blue Cross and Blue Shield and organization of a national insurance company, the committee recommended to the House of Delegates that the A.M.A. approve the organization of a national enrollment agency but that it disapprove the proposal for creation of a national insurance company. The hearings of the committee were most complete, providing full opportunity to be heard to both the proponents and opponents of the proposals.

The House of Delegates was in complete sympathy with the problem of enrolling national accounts and it sanctioned the establishment of a national enrollment agency. The action of the house, however, clearly indicated that the medical profession does not desire to enter the national insurance field directly or indirectly through a national insurance company.

MEDICAL CARE TERMS DEFINED BY COUNCIL

Because of the confusion that has arisen about the meanings of the terms pertaining to medical care program the Council on Medical Service of the A.M.A. has drafted a set of definitions. The following definitions are reprinted for Journal readers and were submitted to the House of Delegates of the A.M.A. for consideration at the A.M.A. interim Session in St. Louis.

Socialized Medicine—a system of medical administration by which the government promises or attempts to provide for the medical needs of the entire population or a large part thereof.

State Medicine—a form of socialized medicine in which the government attempts to provide medical services directly to the general population from funds established by taxation. The physicians become employees of the state and medical practice becomes subject to the directives of the third party.

Sickness Insurance—ostensibly a method of transferring the economic burden of sickness from the individual to the group. Sickness insurance may be voluntary or compulsory.

Compulsory Sickness Insurance—a system of sickness insurance in which all members of a given group of persons in a given governmental area are compelled by law to contribute to and be enrolled in the scheme. Any compulsory sickness insurance program under direct control of the state is socialized medicine, insurance principles no longer prevail and the compulsory contributions become a special tax.

Voluntary Sickness Insurance—that system whereby individual costs are spread over a period of time by a group of people who voluntarily band together to protect themselves against the economic burden of sickness. It involves the insurance principle and an organized system of payment. It is popularly known as voluntary prepayment medical care insurance.

Public Health—those arrangements whereby the government provides medical services for special groups of persons and undertakes activities which are concerned with the protection of the health of the people as a whole. Public health is concerned with persons requiring institutionalized care, with those who are wards of the government, with the indigent, with proper sanitation, and with the control and prevention of communicable diseases.

Health Insurance—used interchangeably with sickness insurance and usually means the same thing. It may be voluntary or compulsory, although national health insurance usually means compulsory sickness insurance.

Group Medical Practice—is the provision of medical service by a number of physicians working in systematic association with the joint use of equipment and technical personnel and with centralized administration and financial organization.

Private Group Clinics—organizations owned and managed by one or more physicians offering medical services. Services are usually supplied by a number of physicians who practice as a group, using joint office facilities and equipment. The physicians are under the supervision of a medical director.

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

*Collins, E. N.: The Diagnosis and Treatment of Irritable Colon: Physiologic, Local, Irritative and Psychosomatic Factors, *M. Clin. North America* 32:398 (March) 1948.

THREE MORE PHYSICIANS PASS HALF CENTURY MARK

Fifty years of medical practice is a long time and three of the more recent presentations to O.S.M.A. members of the gold lapel pin denoting membership in the Fifty Year Club chalk up a total of 159 years of practice for the trio of physicians. Walter Hardy, M.D. and H. A. Higgins, M.D., both of Ardmore, were presented the pins at a special banquet in their honor and C. W. Tedrowe, M.D., Woodward (and for many years secretary of his county society) is the third of the new wearers of the coveted pin.

Dr. Hardy was the first man in Indian Territory to have a medical diploma. He was born in Arkansas and on Sept. 27, 1893 he was graduated from medical college at St. Louis, Mo. A member of Who's Who, other honors he has received include the plaque presented to him by the Masons for 50 years' membership. He has also received a suitable mark of honor for having had charge of the medical practice at Carter Seminary, an Indian School, for 25 years.

Among Dr. Hardy's "firsts" were: the first man in Oklahoma to employ an airplane in the service of medical practice, the first to build a hospital in southern Oklahoma, first to build a radio broadcasting station in Ardmore, the first to use motor machinery in transportation for his medical practice in southern Oklahoma. Dr. Hardy first practiced in Berwyn and Dougherty before coming to Ardmore. In addition to his medical education in the United States, he attended medical institutions in England and Europe.

Dr. Higgins, in his biographical sketch, says he intends to live in Ardmore the rest of his life but his life began thousands of miles from that city in England as he was born Jan. 7, 1874 at Cheltenham in Gloucestershire. When he was 18 he decided that England was "too small and quiet, drab and methodical to suit his then adventurous nature." Landing in New Orleans, he found a man near San Antonio going to Indian Territory in wagons so he helped on the farm and kept his anatomy textbook between the plow handles. He became a naturalized citizen of the United States in 1907. He entered the University of Arkansas School of Medicine in the fall of 1893 and began his practice at Glenn, Piekens Comty, Indian Territory in the spring of 1894. Like many of the early day doctors he interspersed his medical schooling with practice and graduated from Dallas Medical college in 1904 with an average of 97. Dr. Higgins also received a gold medal for the highest average in neurology though he says "I do not know why, as I did not know much about nervous diseases then, and still do not." Since then he has attended postgraduate courses in Oklahoma City, Chicago and Philadelphia. Before moving to Ardmore, Dr. Higgins practiced in Springer several years until 1923 when his home was gutted by fire with none of his personal belongings or furnishings saved.

Dr. Higgins, like Dr. Hardy and other "fifty year doctors," made his first calls on horseback traveling across fields and cow trails, swimming creeks on horse-



Walter Hardy, M.D., and H. A. Higgins, M.D., both of Ardmore are awarded their 50 year pins at a special banquet in their honor at Ardmore. George Garrison, M.D., Oklahoma City, president-elect of the association, made the presentations.



C. W. Tedrowe, M.D., Woodward, receives his 50 Year Pin from George Garrison, M.D., Oklahoma City, president-elect of the Association while Mrs. Tedrowe looks on. D. B. Ensor, M.D., Alva, is shown on the left.

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back and caring for the sick with no help, no sanitation and none of the modern facilities and conveniences now available.

Because he couldn't swim, Dr. Higgins abandoned his former practice of swimming the creeks on horseback with this plan, "whenever any one on the opposite side of the banks wanted me and the creeks were out of their banks," he relates, "I would cut down the biggest pecan tree across the highest banks, and I would climb up in the branches and when I got to the trunk of the tree, I would 'coon it' on my hands and knees. (I cannot walk a log). A saddled horse would be waiting on the opposite bank to take me to the patient."

Dr. Higgins reports "now I am trying my best to retire from the practice of medicine, but, after practicing for over 54 years, it gets in one's blood and is difficult to get out, even though, like the old grey mare, the grey haired doctor can't take what he used to take, many long years ago."

Charles W. Tedrowe, M.D., Woodward, who first hung out his shingle in Brahman, Oklahoma in March, 1898, was born May 14, 1872 at Dayton, Ohio.

While working as assistant general manager for International Harvester Company, he began his study of medicine at the School of Medicine in Indianapolis "burning the midnight oil" until 2 a.m. and arising at 4 a.m. to carry out his day time work. Saving earfare for lunch money the next day, he walked three miles three evening a week to take his chemistry lectures.

His dissecting work was done at night and on Sundays. One Sunday in the early summer he decided to continue his study on the human skull at home, so he wrapped the skull of a negro cadaver in a newspaper, and carried it in his hand on the streetcar. In those days gentlemen gave their seat on the streetcar to ladies, he reminisces, and during a move on the way the skull became unwrapped, and rolled in the aisle, causing much commotion. His skill in tying surgical knots was acquired by tying knots through his wife's apron while she was giving him a quiz on anatomy.

One of the pioneer Oklahoma physicians, he has practiced at Tryon, Shawnee, Cheyenne and Elk City before going to Woodward. In Elk City he established a modern hospital in partnership with the late V. C. Tisdal, M.D.

Dr. Tedrowe came to Woodward in 1916 and established the Woodward hospital but in April, 1918 he enlisted in the army and served overseas for 11 months. In 1926 he moved with his family to Enid where he helped establish the North Independence Hospital, and passing through the depression years, he cancelled off more than \$40,000 of unpaid accounts, and came back to Woodward to start all over again.

Going through another war period, he gave all he had, his skill, his strength, his youngest son, and is still carrying on as a pillar in Oklahoma medicine.

PRECEPTORSHIP PROGRAM STUDIED BY SCHOOL

The Alumni Association of the University of Oklahoma School of Medicine is studying the possibility of establishing a preceptorship program for teaching senior medical students. The medical school faculty recommended in September, 1948, that preceptorship plans be studied for possible adoption by Oklahoma.

In November, 1948, Dr. Mark R. Everett, dean of the medical school, and Dr. William Finch, of Hobart, representing the Alumni Association went to Wisconsin to study the preceptorship program which has been operating there for over 20 years.

Under the Wisconsin plan the senior year is 48 weeks long with a preceptor period of three months. The senior student usually spends this time in connection with a local hospital under the supervision of his preceptor. The preceptorships are scattered over the state, the purpose being to acquaint the student with general practice. Through this plan Wisconsin has been able to improve her physician-rural population ratio.

The results of the Wisconsin survey were reported to the Alumni Council of the Alumni Association on Dec. 12, 1948. At present the Alumni Association is preparing a preceptorship plan for Oklahoma. Their plan will be submitted to the faculty for consideration early this year.

Grants Awarded

Final transfer of the \$22,000 from the Noble bequest has been made to the School of Medicine. This money will be used to equip a special pediatric research laboratory in the Crippled Children's Hospital. The laboratory will be called the William F. Noble Memorial Laboratory, and will be under the direction of Dr. Henry B. Streng, assistant professor of pediatrics.

Two more research grants have been awarded to members of the medical school faculty. Dr. Howard C. Hopps, professor of Pathology has received \$11,602.00 to finance research on glomerulonephritis; this is a renewal of a previous grant. Dr. Arthur A. Hellbaum, professor of pharmacology has received a grant of \$4,795.00 to be used in a study of pituitary-gonadal relations.

Appointments Made

Fourteen new appointments to the medical school faculty have been made. These are: Dr. C. Alton Brown, clinical assistant in medicine; Dr. John J. Donnell, clinical assistant in medicine; Dr. John Hartwell Dunn, clinical assistant in urology; Dr. Lonis S. Frank, instructor in pediatrics; Dr. William Thomas Gill, of Ada, visiting lecturer in pathology; Dr. George H. Gnthrey, clinical assistant in psychiatry; Dr. Arthur W. Hoyt, of Chickasha, visiting lecturer in pediatrics; Dr. Dick H. Huff, clinical assistant in medicine; Dr. Fred A. Quenzer, instructor in Surgery; Dr. Harold G. Sleeper, clinical assistant in psychiatry and neurology; Dr. Ernest M. Tapp, clinical assistant in medicine; Dr. Lal. D. Threlkeld, clinical assistant in obstetrics; Miss Barbara Wells, instructor in bacteriology and preventive medicine and public health.

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STUDIES PUBLIC RELATIONS PROGRAM OF O.S.M.A.

Larry Rember, public relations counsel of the Council on Medical Service of the A.M.A. spent November 8 and 9 in the Executive Office of the Oklahoma State Medical Association. He reviewed the Public Relations Program of the state medical association which in general he praised very highly.

Mr. Rember's visit was of great value since it offered an opportunity for the officers of the Association to exchange at first hand with a representative of the A.M.A., many ideas in regard to what the State Association is doing in the way of public relations and at the same time to hear from Mr. Rember report as to what is being done by other states and by the A.M.A. in the public relations field.

At a meeting of the Oklahoma City chapter of the Medical Service Society of America (composed of detail men representing pharmaceutical companies) on November 8, Mr. Rember spoke on the subject "The National Health Assembly in Reverse." While in Oklahoma City it was impressed very forcibly that the O.S.M.A. is standing ready and able to enter wholeheartedly into any well thought out and developed plan of meeting the threat of socialized medicine which may be advanced by the A.M.A.

DOCTORS' CLAIM PAYMENTS ALMOST EQUAL PATIENTS'

Doctors become ill and have accidents just the same as their patients, according to records of the Oklahoma State Medical Association insurance program.

Sickness and accident claim payments of \$60,707.87 have been made to Oklahoma physicians by North American Accident Insurance Company, underwriters of the Association sponsored accident and health insurance program and an old line stock company organized in 1886.

Of this amount payments totalling \$31,578.91 have been made during the last 12 months. Size of the claim payments range from only a few dollars to sums exceeding \$2,000.00.

These figures are taken from the annual progress report on the insurance program made by C. W. Cameron, southwest division manager of the underwriters, to the insurance committee of the association. This committee is composed of the following: Chairman, John McDonald, M.D., Tulsa; L. Stanley Sell, M.D., Oklahoma City; Bryon Cordoumier, M.D., Enid, members.

During the annual service campaign now in progress, special representatives will explain rights and privileges to O.S.M.A. members. Members who are now participating in the program will have an opportunity to make application for increase in coverage, decrease in coverage and other changes such as change of beneficiary, etc.

The insurance committee reports that the insurance company underwriting the program has developed a companion insurance program known as the Oklahoma Medical Association Employees Insurance Program. This program is similar to the physicians' own insurance plan and will provide employees with broad coverage insurance at low rates. Coverage for the employees will include time loss caused by accidents or time loss caused by illnesses, accidental death, loss of a hand, foot, eye or any two members of the body. It is anticipated that employees will welcome the opportunity to participate in a program similar to the coverage available for large firms with several hundred employees.

IMPROVED PLAN FOR VETERANS MEDICAL CARE

Efforts are being made to eliminate the various sources of difficulty which arise between the doctors of the state and the Veterans Administration in connection with out-patient treatment for service connected veterans.

When the contract between the Veterans Administration and the Association was entered into, a consultant committee from the association was appointed for each Veterans Administration regional office. Those committees are now functioning. It is the responsibility of those committees to review all cases in which there is a difference of opinion between the local physician and the Veterans Administration as to diagnosis or treatment, as well as cases in which there are differences between the doctor and the V.A. as to fees.

Under the plan of operation which has been agreed upon, all such cases will be referred to the consultant committee for its consideration. When, in the opinion of the committee, the case is such that it should be referred back to the doctor concerned, that referral will be made by the committee rather than by the V.A.

It is hoped that this plan will secure the wholehearted cooperation of every member of the profession and at the same time insure that their interest will be fully protected.

BLUE CROSS-BLUE SHIELD COMMENDED BY HAWLEY

Paul R. Hawley, M.D., of the Allied Medical Care Plans, speaking before the Oklahoma County Medical Society November 5 emphasized the importance of voluntary pre-payment medical care plans and especially the Blue Cross and Blue Shield in combating any effort on the part of the government to interfere with or control medical care.

He pointed out, however, that it will be necessary for these plans to make provision for insuring practically all those persons not now eligible if the plans are to be used effectively. The growth of the plans, which are really in their infancy, has been phenomenal but that growth in itself will not be sufficient unless their coverage can be further extended, he emphasized. He made the point that the increasing clamor for some kind of governmental control of medicine is in part the result of increased costs of medical care. Every doctor knows that the increased costs of medical care are a result of the scientific advances in medicine which are taking place more rapidly every day and it has been those very advances with increases in costs which have produced the need for some system of voluntary pre-payment of medical care.

DO YOU KNOW?

That, exceeding the 1500 mark, membership in the Oklahoma State Medical Association for 1948 topped all previous records with a total of 1,570 members reported in time for this Journal deadline, November 30?

Included in the count are 10 special service or full time employee members and 65 honorary, life, or associate members. Fully paid members, or those not falling in a special category, totaled 1,495. In 1947 the membership was 1,490 for both fully paid and special service members.

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HOSPITAL CONSTRUCTION UNDER THE HILL-BURTON ACT

At the County Officers meeting early this fall one of the guest speakers was George D. Kester, construction engineer, hospital division, Oklahoma State Department of Health, who spoke on hospital construction under the Hill-Burton act. A resume of his speech is given below.

I am taking it for granted that you are all familiar, more or less, with the Hill-Burton Construction Act and its general provisions. In this paper I will try to give you a factual review of the status of the program to date in this State. It is now actually in its second year of operation with 22 approved projects.

The Federal-aid allotment to Oklahoma for the year 1947-48, was \$1,640,000. Considering this allotment as one-third, we have a total construction fund of \$4,920,000. for hospitals of various types, for the first year. The amount of federal-aid funds involved in the 22 projects mentioned above adds up to \$1,375,623.70, which means \$4,223,572.17 in total construction projects. Since July 1 of this past fiscal year, the total \$1,640,000. has been entirely obligated. This was done by including Comanche county in last year's construction schedule.

Apparently, due to the showing that Oklahoma has made this past year in the construction program, we had a slight increase in the allotment of federal funds for the year, 1948-49. Allotments to a good many states were reduced. We think we will have the first hospital in the nation to be started and completed under this program. Various types of hospitals on our schedule include: 17 general hospitals from 16 to 78 beds; tuberculosis wards in mental hospitals; and an addition to the state laboratory. Included in our schedule are three projects for equipment only in which the construction had been completed before a request was made for assistance. There are also several remodeling projects which will provide more bed space.

To give you some idea as to the distribution of projects between urban and rural areas, the following is a list of the projects by location, type and size:

State Laboratory Addition, Oklahoma City
Eastern State Hospital, Vinita—30-bed T. B. Ward
Western State Hospital, Fort Supply—Remodeling for bed space
Central State Hospital, Norman—50-bed T. B.
Geymon Municipal Hospital, Geymon—30-bed General
Kingfisher Community Hospital, Kingfisher—20-bed, General
Choctaw County Memorial Hospital, Hugo—32-bed, General
Nowata Hospital, Inc., Nowata—30-bed, General
Watonga Municipal Hospital, Watonga—25-bed, General
Okeene Municipal Hospital, Okeene—20-bed, General
Jackson County Memorial Hospital, Altus—55-bed, General
Cushing Municipal Hospital, Cushing—30-bed Addn., General
Stillwater Municipal Hosp., Stillwater,—50-bed Addn. Gen.
Fairfax Municipal Hospital, Fairfax—16-bed, General
Okarche Memorial Hospital, Okarche—19-bed, Gen., Equipment only
University Hospitals, Oklahoma City—34-bed, Addn., Gen. Equipment only
Sequoyah County Hosp., Sallisaw—24-bed, Gen. Remodeling

LeFlore County Memorial Hospital, Poteau—40-bed, General
St. Joseph's Hospital, Seminole—30-bed, Gen., Addn., Remodeling
Central State Hospital Annex, McAlester—69-bed, Gen., Remodeling
Expand:
Comanche County Hospital, Lawton—100 bed, General—*Next Year*

We have had considerable misgivings in this program concerning costs. We think that the Federal-aid just about covers the increase in the cost of construction over the past three years or since the end of the war. The costs of labor and materials are still rising and it is impossible to predict when they will stop. When this program first started, we were estimating hospital construction costs at about \$7,000 per bed. Then we changed it to \$8,000, then to \$9,000 and \$10,000. Now it is thought that some projects will cost \$11,000 or more. Contracts on our complete building projects range from \$1390 per square foot to \$16.10 per sq. ft. At this time we are estimating equipment at \$1,200 per bed. However, the high costs haven't stopped some communities from raising their share of the funds, like one county which, a short time ago, voted a \$600,000. bond issue by a six to one vote. One of the surprising things of this program is the way in which the various communities have so readily raised the funds for all these hospitals. I think it is an excellent indication of the desire and need for better hospital facilities. However, another county recently voted down a bond issue for hospital construction. While we don't like to see this happen, there have been considerably more bonds voted than turned down.

You will note from the above list of projects that most of them are of a comparatively small capacity and in the strictly rural areas. These small projects have a high priority in our state plan. A small project located in a high priority will be built before a larger project in a lower priority, provided that community can raise the funds. A given community does not lose its priority rating until a hospital is built in its area. There will be more of the larger projects with lower priority ratings built in the second year and the succeeding years.

Our plans for the future include quarters for student nurses, the remodeling of several units of the Central State Hospital at Norman, remodeling and additions to the State Tuberculosis Hospitals, and assistance to a number of the larger hospitals over the state. This does not exclude the smaller communities who can participate in the program each year. Just a word concerning quarters for student nurses. The advisory council decided to restrict the Federal participation to those hospitals having student nurses training schools. This was based on the intent of the constructive program to provide more bed space for patient care.

KANSAS RULES AGAINST OSTEOPATHS

Osteopaths in Kansas lost a federal court decision in the legal fight to practice surgery and medicine in Kansas. A special three-judge federal district court denied an application November 16 for an injunction to block enforcement of the Kansas medical practices act. The statute forbids osteopaths in Kansas from practicing surgery and administering drugs.



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Factories throb to the pound of his inventions—while he sits. Hour after silent hour he sits and schemes mechanical schemes or times the pace of tiny models. In his spare time? Moves to a rocking chair and reads. Has no appetite? Neither do hundreds of others whose occupations or pastimes require little physical energy. And you could cite many other reasons for inadequate diets—excessive smoking, indifference, ignorance, strong likes and dislikes . . . In many such cases, your prescription for one or more vitamins accompanies your advice on dietary reform. When you prescribe an Abbott product, you are assured that your patient will receive the full potencies intended. There is an Abbott vitamin product to fill every need—for one or a combination of vitamins, for supplementary or therapeutic levels of dosage, for oral or parenteral administration. Your pharmacy will be glad to fill your prescriptions. ABBOTT LABORATORIES, NORTH CHICAGO, ILLINOIS

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OBITUARIES

RALPH V. SMITH, M.D. 1871-1948

Ralph V. Smith, M.D., Britton, died November 27 following a heart attack.

Dr. Smith was graduated from Washington University at St. Louis in 1898 and took postgraduate training at various clinics including Chicago, Kansas City and the Mayo clinic at Rochester. From 1911 to 1914 he was chief of staff at the Methodist hospital at Guthrie and also had been on the staff of Hillcrest and St. John's Hospitals in Tulsa and Wesley hospital in Oklahoma City. From 1911 to 1915 he was associate professor of surgery at the University of Oklahoma School of Medicine. He also practiced in Pryor several years.

Dr. Smith was an honorary member of the Oklahoma State Medical Association and also a past president of the Association. He received his 50 year pin at the annual meeting in May. He was also secretary of the State Board of Medical Examiners from 1915-1918. A member of the Kiwanis club at Britton, he was on the city council and school board at Guthrie among other civic organizations in which he was active. He was a major in the medical corps during World War I.

Surviving are his widow, Mrs. Ruth Smith, one daughter, Mrs. Harry Frantz, Enid; a sister, Mrs. Maud L. Ball, Oklahoma City; and a brother, Sam Smith, Guthrie.

S. C. DAVIS, M.D. 1868-1948

S. C. Davis, M.D., Blanchard, died November 16 in a Chickasha hospital. He had been in ill health for some time.

Dr. Davis was born in Indian Territory, October 31, 1868. He received his medical education at the Louisville, Ky. School of Medicine and did graduate work in Baltimore and Fort Worth. He was a 32 degree Mason and a member of the Consistory at McAlester, a former president of the McClain County Medical Society, a member of the Methodist church and a member of the Board of Stewards and former trustee of the church.

Surviving are three daughters, two sons, a brother, two sisters, 11 grandchildren and two great-grandchildren.

GRANT TO SCHOOL

Among the 37 grants of funds totalling \$455,715 for research in medical and related scientific fields is the University of Oklahoma School of Medicine. The grants were approved by Surgeon Gen. Leonard A. Scheele of the Public Health Service. The medical school was allotted \$11,602 for the investigation of the essential nature and pathogenesis of glomerulonephritis.

HEALTH MEN APPOINTED

Recently appointed county superintendents of health are: J. T. Godfrey, Jr., M.D., Ardmore, Carter County; N. H. Cooper, M.D., Ponca City, Kay County; Dwight D. Pierson, M.D., Mangum, Greer County; and C. L. Tefertiller, M.D., Altus, Jackson County, it was announced by G. F. Mathews, M.D., Commissioner of Health for Oklahoma.

BOOK REVIEWS

A. M. A. INTERN'S MANUAL. Philadelphia, W. B. Saunders Co. 1948. 201 pages.

This concise book is filled with much information of general and specific interest to the intern. Part I is titled "Internships and Residencies—General Information." Part II tells what to do in the various emergencies and discusses the important laboratory procedures. In Part III, the indications and dosage of the "useful drugs" are listed. The next section gives the diagnosis and treatment of acute poisoning. Diet and nutrition is the succeeding topic, followed by the section on physical therapeutic measures. Legal aspects of internships are given by the Bureau of Legal Medicine and lastly there is added a description of the sundry bodies which comprise the American Medical Association.

This book was prepared by the Council on Medical Education and Hospitals and the Council on Pharmacy and Chemistry of the American Medical Association.

The A. M. A. Intern's Manual should be read before the student begins his practical training and should serve as a handy reference and guide throughout his hospital experience.—J. W. Morrison, M.D.

PRACTICE OF ALLERGY. Warren T. Vaughan, M.D., Richmond, revised by Harvey Black, M.D., Dallas. St. Louis, C. V. Mosby Company. Second Edition. 1948. Price \$15.00.

This is a broad clinical treatise covering all phases of allergy in detailed information in its 1092 pages that is not available elsewhere under one cover.

It is beautifully illustrated by 319 illustrations.

The text is a second edition of Vaughan's Practice of Allergy which was written some 10 years ago and what was one might consider the allergists' bible at that time. Dr. Vaughan was preparing the second edition when it was interrupted by his untimely death. This work was carried through by his close friend, Dr. Harvey Black, who has retained the Vaughan character and flavor. While adding considerable material himself, he called in such authorities as Mr. O. C. Durham, Dr. J. B. Howell and Dr. James Holman to write chapters on aerobiology, fungus infection and vital capacity respectively, all of which are complete and enlightening.

The section on the Approach to Physiologic Interpretation is excellent and unique and done in a style truly characteristic of Dr. Black.

There is considerable less space devoted to clinical allergy than there is to pollens, pollenosis and inhalant allergy. However, there is no special feature in this text for criticism or praise. It more nearly meets the needs of a text book in allergy for the specialist in this broad new field. Because of this, it is a little too complex for the medical student and beginner in allergy in much of its material.—Johnny A. Blue, M.D.

VA DOCTORS NEEDED

One hundred full time doctors are needed by Veterans Administration for duty in its tuberculosis hospitals, it has been announced. Salary scale ranges between \$4,479 and \$10,305 annually. Inquiries should be addressed to the Chief Medical Director, Veterans Administration, Washington 25, D. C.

The Association For The Study of Internal Secretions Announces A Postgraduate Assembly in ENDOCRINOLOGY

Oklahoma City, Oklahoma

Skirvin Hotel

February 21-26, 1949

The faculty will consist of prominent researchers and clinical endocrinologists in the various branches of the medical sciences, gathered from the United States and Canada and will include the following:

Dr. Willard M. Allen, Professor
and Head, Department of Obstetrics and Gynecology,
Washington University School of Medicine

Dr. Edwin B. Astwood
Research Professor of Medicine
Tufts College

Dr. J. S. L. Browne
Professor of Medicine
McGill University

Dr. Edward A. Doisy, Professor
and Head, Department of Biochemistry
St. Louis University School of Medicine

Dr. Roberto Escamilla
Associate Clinical Professor of Medicine
University of California Medical School

Dr. E. C. Hamblen
Associate Professor of Obstetrics and Gynecology
Duke University School of Medicine

Dr. Laurence W. Kinsell
Associate Clinical Professor of Medicine
University of California Medical School

Dr. C. N. H. Long
Sterling Professor of Physiological Chemistry and
Dean, Yale University School of Medicine

Dr. Cyril M. MacBryde
Associate Professor of Clinical Medicine
Washington University School of Medicine

Dr. E. Perry McCullagh, Chief
Dept. of Endocrinology and Metabolism
Cleveland Clinic

Dr. Harold L. Mason, Professor
Physiological Chemistry, Mayo Foundation
University of Minnesota

Dr. Warren O. Nelson
Professor of Anatomy
Wayne University

Dr. Edward Rynearson
Associate Professor of Medicine, Mayo Foundation,
University of Minnesota

Dr. Hans Selye
Professor of Experimental Medicine
University of Montreal

Dr. E. Kost Shelton
Associate Professor of Medicine
University of Southern California

Dr. Paul M. Starr
Clinical Professor of Medicine
University of Southern California

Dr. Willard O. Thompson
Clinical Professor of Medicine
University of Illinois College of Medicine

Dr. George Thorn
Hershey Professor of Physics
Harvard Medical School

Dr. Henry H. Turner
Associate Professor of Medicine
University of Oklahoma School of Medicine

Dr. Lawson Wilkins
Associate Professor of Pediatrics
Johns Hopkins Hospital

This course will be a practical one of interest and value to the specialist and those in general practice. The program will consist of lectures, clinics and demonstrations. Ample time will be given to questions and answers at the end of each session, and registrants are encouraged to contact members of the faculty for individual discussions.

A fee of \$100 will be charged for the entire course and the attendance will be limited to 100. REGISTRATION WILL BE IN THE ORDER OF CHECKS RECEIVED AND WILL CLOSE ON FEBRUARY 1, 1949. Should there be an insufficient number of applicants to fill the course, the registration fee will be immediately refunded in its full amount.

Please forward application on your letterhead, together with check, payable to The Association for the Study of Internal Secretions, to Henry H. Turner, M.D., Chairman of the Postgraduate Committee, 1200 North Walker Street, Oklahoma City, Oklahoma, before February 1, 1949.

Applicants should make reservations directly with hotels of their choice. Some of the better downtown hotels in Oklahoma City, listed according to their proximity to the Skirvin are: Skirvin Tower, Huckins, Wells-Roberts, Biltmore and Black.

HAVE YOU HEARD?

E. C. Mohler, M.D., Ponca City, has been elected president of the Kiwanis club of that city for the coming year.

L. R. Kirby, M.D., Cherokee, attended the International Medical Assembly in Cleveland, Ohio, and the International College of Surgeons in St. Louis.

Stanley Childers, M.D., who has been associated with his father, *J. E. Childers, M.D.*, at Tipton since his discharge from the army, will move to Alabama to practice soon.

Malcolm Phelps, M.D., El Reno, who flew his own plane to the A.C.P. meeting in San Francisco, reported that he never went higher than 10,000 feet and could have flown at 7,000 feet.

W. E. Seba, M.D., Leedey, flew to Oklahoma City recently for a reunion with several of his classmates at the St. Louis College of Physicians and Surgeons from which he graduated in 1905. Meeting in the office of *Carl Puckett, M.D.*, Oklahoma City, who was one of the classmates, were Dr. Seba, Ralph Jones, M. D., who is on the staff at Tinker Field, and Roy Tweedy and Walter Tweedy, both of whom are physicians in Illinois. It was their first "get together" in 43 years.

E. Hirsch Fite, M.D., Muskogee, was elected vice-president of the South Central Section of the American Urological Association. The district includes Oklahoma, Texas, Arkansas, Missouri, Kansas, Nebraska, Colorado, New Mexico and the Republic of Mexico.

V. M. Rutherford, M.D., Midwest City, attended a four weeks course of study in traumatic surgery at the Cook County Graduate School of Medicine, Chicago.

J. A. McIntyre, M.D., Enid, spoke on "Newer Trends in Medicine" at a recent dinner meeting of the Enid Business and Professional Women's club.

Port Johnson, M.D. and *Thelma Varian, M.D.*, Muskogee, were guest speakers at a Muskogee P-T-A meeting when the theme was "Foundations for Better Health and Physical Fitness."

E. Stanley Berger, M.D., Lawton, spoke on mental hygiene at a Lawton P-T-A meeting.

Clyde Keruek, M.D. and *Paul Keruek, M.D.*, Holdenville, have opened a new clinic in Holdenville. Open house was held November 14. Associated with the Drs. Keruek is C. M. Bloss, M. D.

H. D. Wolfe, M.D., Hugo, chairman of the Choctaw county tuberculosis association, spoke to the Lions club of that city promoting the Christmas Seal Sale.

William K. Ishmael, M.D., Oklahoma City, spoke on "So You Have Arthritis" at a general meeting of the Ponca City Women's club recently.

Felix M. Adams, jr., M.D., Nowata, discussed socialized medicine before the Nowata Rotary club. Dr. Adams is chief of staff of the Nowata hospital.

Norris Smith, M.D. and *E. L. Buford, M.D.*, Guy-mou, have announced the near completion of an addition to the Smith-Buford clinic. Glenn Hopkius, M.D., and Ronald McCoy, M.D., both University of Oklahoma School of Medicine graduates, have joined the clinic staff.

Ben H. Nicholson, M.D., was elected president of the Oklahoma City Clinical Society. Other officers elected include F. Maxey Cooper, M.D., director of clinics; John H. Lamb, M.D., vice-president; F. Redding Hood, M.D., secretary; and Nesbitt Miller, M.D., treasurer.

Howard Puckett, M.D., Stillwater, has been certified as a specialist in general surgery by the International College of Surgeons.

FIFTY PER CENT OF O.S.M.A. TAKE POSTGRADUATE COURSE

With the closing of circuit nine of the postgraduate course in gynecology presented by the Oklahoma State Medical association in cooperation with the Oklahoma State Department of Health and the Commonwealth Foundation of New York, figures concerning the course have been compiled by the O.S.M.A. postgraduate committee.

A total of 780 physicians enrolled in the course during the two years and 88 per cent was the average attendance. J. R. B. Branch, M.D., instructor, gave 475 private consultations with the physicians enrolled in the 45 teaching centers. Approximately one half of the O.S.M.A. membership took the course.

Information concerning the tentative postgraduate course in internal medicine will be announced soon by the postgraduate committee. It is planned to begin the course the first part of 1949.

CRUDE DEATH RATES RELEASED

According to figures recently released, the crude death rate in Oklahoma during 1947 was 707 higher than in 1946 when the number was 18,620. For the United States, during the first nine months of 1948, it was estimated to be 10.0 deaths per 1,000 estimated population. The corresponding rate for the same period of 1947 was 10.2.

Crude death rates are affected by a number of factors in addition to mortality conditions, such as age-race-sex composition in the population and completeness of death registration. Therefore, consideration must be given to these factors in comparing crude death rates either by state or by year. For example, a comparatively high crude rate does not necessarily indicate less favorable mortality conditions.

ANNOUNCEMENTS

American Board of Obstetrics and Gynecology part one written examination and review of case histories for all candidates will be held in various cities Friday, Feb. 4. Application forms and bulletins are sent upon request made to American Board of Obs. and Gyn., 1015 Highland Building, Pittsburgh 6, Pa.

International Congress on Rheumatic Diseases will hold its first United States meeting at the Waldorf Astoria in New York May 30 to June 3. Host is the American Rheumatism Association.

Eli Lilly and Company announces the appointment of George M. Moore as manager of their Oklahoma City District. He formerly represented the company in north-eastern Oklahoma for 10 years.

National Gastroenterological Association announces its annual prize contest with \$100 and a certificate of merit to be given for the best unpublished contribution on gastroenterology or allied subjects. For information write the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

American Academy of General Practice. First annual scientific assembly, Netherlands Plaza hotel, Cincinnati, March 7, 8, 9.

Oklahoma Academy of General Practice will hold its first annual session March 18 and 19 in Shawnee. Information can be obtained from the O.S.M.A. executive office, 210 Plaza Court, Oklahoma City.

Oklahoma City Obstetrical and Gynecological Society. Oklahoma City, January 14.

Chicago Medical Society fiftieth annual clinical conference, Palmer House, March 1, 2, 3, 4.

Southwest Allergy Forum. El Paso, April 4 and 5, 1949.

Oklahoma State Medical Association annual meeting, Tulsa, Mayo Hotel, May 15-19.

Association for the Study of Internal Secretions post-graduate course in endocrinology will be held in Oklahoma City February 21-26, Skirvin Hotel. Applications with the fee of \$100 should be made to Henry H. Turner, M.D., Chairman of the Postgraduate Committee, 1200 North Walker Street, Oklahoma City 3, Okla.

NEW STAFFING METHOD

A new method of staffing is being inaugurated by the Veterans Administration hospitals with the initial experiment to be begun at the VA hospital, Grand Junction, Colo. The hospital will have no residents. Instead, it will be staffed with men who have completed their formal residency training and are prepared to put in two years of practice in their specialty, under supervision of diplomates. This training is necessary as part of the requisite for becoming diplomates themselves.



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March 1, 2, 3, 4, 1949

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

HOSPITALS IN THE PRACTICE OF MEDICINE

It is gratifying to see that at long last United Medical Service is striking at this unwarranted practice. As indicated by the following from U.M.S. Medical Bulletin the blow comes straight from the shoulder: "United Medical Service has declined to pay hospital vendors of professional service through the agency of an intern, a resident, or salaried doctor."

If we do not want the government to add compulsory health insurance for the care of millions in addition to government practice already in progress, it is time to see that civilian hospitals curtail or discontinue what really amounts to institutional practice of medicine.

The following from Walter E. Brown, M.D., Secretary-Treasurer of the Oklahoma State Radiological Society, refers to a resolution which is in line with the action of U.M.S. recently publicized. For the benefit of the reader this statement is being reproduced in full. Those who are interested in the attitude of organized medicine may turn to the A.M.A. Journal for action of the House of Delegates on the exploitation of physicians by hospitals.

"One of the active medical groups in this state is the Oklahoma State Radiological Society, through whose instigation a significant resolution was submitted to the House of Delegates of the Oklahoma State Medical Association, and passed in the House of Delegates meeting on May 16, 1948 in Oklahoma City. A copy of this resolution was published on page 326 of the Journal for August, 1948.

"Its import is condemnation of the practice of hospitals in this state employing doctors on a full-time salary basis, as they employ regular hospital personnel. The resolution needs wide dissemination, not only through Oklahoma but through the nation. The subtle encroachment on the private practice of medicine by institutions is not better exemplified than in the exploitation of physicians engaged to direct the operation of x-ray departments. Not only does this

relationship subjugate the doctor to the institution but it actually places the hospital in the practice of medicine, competing with the private practitioner. Granted that the radiologist who has sole control over a hospital x-ray department on a percentage or rental basis has a wonderfully lucrative set-up in most instances, it nevertheless incumbent upon staff physicians to oppose contractual arrangements whereby any physician is employed by a hospital on a straight salary basis, except in the case of governmental agencies and schools, as the resolution sets forth. If radiologists are on a salary basis it follows that anesthesiologists should be, pathologists should be, and if this group submits why not full-time salaried internists, salaried surgeons, et cetera? This is the point being made by the radiologists in their commendable fight to oppose this undesirable trend."

E.P.I.A.

For the benefit of those who have not had an advanced course in alphabetical juggling, these letters mean "End Poverty in America."

When in 1933 Harry Hopkins had worn himself to a nubbin spending the taxpayers' money and the treasury was growing anemic, President Roosevelt, fearing he might sacrifice a good confederate and jeopardize his spending spree, takes more money out of the taxpayers' purse and sends Harry on a health-building sea voyage with instructions to look over "social insurance schemes in England, Germany, Austria and Italy because I think you might pick up some ideas useful to us in developing our own American plan for security." Can any kind of security come out of Europe? These two obsessive, compulsive spendthrifts were looking over the field where already so-called security was wrecking national honor and integrity, in order to enlarge their own plans for riotous spending on the road to ruin.

In spite of personal contact with the Nazi regime and his observation of the blood purge, the decline of the Reichstag, the death of Hindenburg, the murder of Dollfuss

and Hitler's swift rise to total power, Harry returned with a flaming torch from the Bismarckian social security plan already responsible for the European conflagration. This torch set the social security fire ablaze for the New Deal. Thus millions of American citizens have lost their liberty and their self respect while being placed under obligation to the government that enslaves them. Strange to say the man who ignored the European social security debacle, made bold to say in his speech of acceptance, when appointed secretary of commerce: "We find ourselves in a world which seems to have gone almost crazy in a welter of hates and fears, and in which a new and competitive philosophy has suddenly emerged. A world in which dictatorships, both red and black, have swept aside with ruthless decision almost all of the liberties and freedoms that have made life beautiful and wholesome." Considering his acknowledged power of perception and his opportunity to see all this in Germany one wonders about his sincerity.

After having channeled billions upon billions of the taxpayers' dollars through thousands upon thousands of hatched up projects we now come to the bureaucrats bonanza — socialized medicine.

The present plan under the guise of the Ten Year Prescription is to enslave all the people as soon as possible. Ostensibly the prescription is written for ten years but the chains accompanying this generous gesture are forged for life. Socialized medicine is the soul of dissembling and destruction.

BRITISH OPINION WITHOUT AMERICAN PROVOCATION

The following paragraphs are lifted from letters from a young woman observing and lamenting the loss of competition in medicine and the resulting Nationalization of medical, dental, and pharmaceutical services; also hospitalization. The first was dated October 23, 1948; the others followed our presidential election.

"I don't know if you've heard of the new national insurance we have here, (Great Britain) but since July we don't have to pay for doctors, dental treatment or optical treatment. All workers are forced to pay a contribution each week and then they and their families are covered for these benefits. The amount they pay is 4 11 which is quite a lot out of one wage, and as the scheme isn't paying it looks as though the contributions will be increased. Everyone has been rushing to get the benefits and if you break

or lose your spectacles you have to wait weeks to get a new pair. Then again I don't think people care what you get when you aren't the one who pays for it, so personally I don't like the new scheme. I believe in competition — not nationalism."

"I wonder if you will have this new national insurance now that Truman has been re-elected? As I've said, I don't care for it at all, because people don't pay the same attention to you as they would if you were paying for treatment. Then again, you can only have the type of things the State decides upon. If you want extra special teeth or fancy spectacles, you have to pay for the lot. They won't even let you pay the difference between the standard issue and a better quality. You either take what is given or pay the full cost of something different, which usually turns out to be very expensive as they make all the money that they can out of these luxuries."

"Yesterday, my false tooth that I have right in the front broke right off the plate. I took it to the Dentist hoping that he would fix it quickly because I feel so awkward having a gap in the front. I had a sample of this new insurance when they said how busy they are and all that. Anyhow, by persuading them, they have agreed to do it for Tuesday, but I hope and trust that I don't need much under this insurance scheme."

Readers, draw you own conclusions and pass on to friends who are silent or who unwittingly clamour for sour grapes.

WHAT PRICE MEDICINE

Chiefly through the services of American medicine the span of life in the U. S. has been doubled; physical well being has been decidedly augmented and, considering the mounting strain upon the nervous system, we can justly say that psychic stamina has shown corresponding gains. In the last analysis the measure of our national strength is the measure of sustained human energy, mental competency and the tenacity of life. The winning of two world wars was made possible through these important contributions. Likewise these contributions have made productive happy homes; they have made possible the incredible record of production in the fields of industry, agriculture and animal husbandry and finally in the fields of scientific and mechanistic development. More nearly than in any other group the medical profession practices what "The Great Physician" preached.

Yet it is universally agreed that we have

fallen behind spiritually and morally. Considering what medicine has accomplished and its practical approach to the teachings of the Master, would it not be wise for the New Deal to cherish and foster this spontaneous product of American medicine operating as a free enterprise. Medicine's relationship to society is outstanding among the few remaining spiritual fragments of our modern existence and for the benefit of the people it should be preserved.

Our modern concept of psychosomatic medicine makes the spiritual as important as the physical and places upon physicians the obligation to fight for the patient as a composite whole having the right to choose for both body and soul. Though bureaucracy can supply drugs and appliances in cold formality it cannot qualify spiritually, therefore, it cannot replace the patient-doctor-God relationship.

The people should be informed that American medicine under its present freedom of action is their rightful heritage and that since there is no Golden Rule in the world of bureaucracy they must fight for this heritage.

TUBERCULOSIS IN THE AGED

Though not generally known, the mortality rate for tuberculosis in the United States is higher after 50 than at any other time. In fact, the peak is between 65 and 70. Obviously, there is nothing new in the mortality pattern, yet it has been most difficult to overcome the common belief that tuberculosis is rare in the aged.

This longtime fallacy has had much to do with the widespread incidence of infection. As early as 1752 statistical studies in Vienna indicated that 20.8 per cent of the total mortality occurred after 50 years of age. At the turn of the last century Schlesinger in Austria, Calmette in France and Osler in America stressed the prevalence of tuberculosis in the aged.

Today with emphasis upon discovery and prevention the aged represent the most difficult and the most dangerous age group. Elderly people thinking they are immune are prone to attribute all symptoms of ill health to advancing age and often they laugh at solicitude. Even those who cough and wheeze the years away refuse to see a doctor. The mass x-ray campaign means nothing to them. When tuberculosis in the children and grandchildren is brought to light they are deeply concerned but naively innocent of the strategic position they hold in the tragic drama. Often their feelings are hurt if they are

placed under suspicion and examination is forced upon them.

Perhaps there is some excuse for this attitude on the part of certain elderly people. Often the disease in the aged burns itself out and becomes non-toxic, leaving its victims virtually symptom-free while they continue to broadcast tubercle bacilli throughout the fertile family soil.

These significant facts place a heavy responsibility upon family physicians, and pediatricians. The specialists in thoracic diseases may never see these elderly victims of tuberculosis unless they are ferreted out by the physicians who serve the other members of their families. Affable old people enjoying a sense of false security have no right to inflict calamity upon adoring children and grandchildren.

A living descendant of Ralph Waldo Emerson once said to the writer, "I attribute my calcified broncho-pulmonary nodes to the Emersonian strain of the tubercle bacillus acquired while sitting on the distinguished author's sharp knees for bedtime stories." Another wrote that his own grandchildren represented the first generation of the Emerson family to escape infection. Intellectual attainments and gracious living mean little to the tubercle bacillus. Only eternal vigilance and the persistent exercise of professional authority over these prolific carriers can ever dislodge the enemy from this favored position. The aged should not be exempt from tuberculin testing, Roentgenraying, sputum testing and sputum culturing.

The responsibility of the physician is doubled by the fact that today twice as many people are living into the past 50 age period. The grandparents in physicians' families should be first on the list. The public health service and volunteer agencies can never fully cover this age group without the help of the family physician.

THE THOMAS PATTERN

Fortunately medicine as a free enterprise has no set mold, no fixed pattern. On Sunday, December 19, the front page of the Daily Oklahoman carried a significant story. This story was inspired by the life and work of Dr. W. A. Ryan of Thomas, Oklahoma, who professional services given in the free American fashion caused his patients and friends to surprise him with a 1949 car as a Christmas gift. The type of his work and the spirit of his people are incompatible with government medicine. They should be warned that the administration is planning to take this service away from them.

SCIENTIFIC ARTICLES

AFFLICTIONS OF THE GASTROINTESTINAL TRACT OF THE INFANT*

P. E. Russo, M. D.**

Many of the gastrointestinal disturbances encountered in infants are due to faulty development of this tract during fetal life. A broad embryological knowledge of the digestive system is quite necessary in the understanding of these conditions and facilitates their detection and diagnosis. The purpose of this paper is to review some of the more common conditions.

As in the examination of the GI tract of the adult, barium media is often used, although, in some conditions use of rubber catheter, or lipiodol may serve the same purpose, whereas, in others a plain film may give the information. It is not unusual for us to receive requests for such examinations from the Pediatric Department on infants who have any type of gastrointestinal tract disturbances of any sort.

Esophagus: Atresia of the esophagus is not an uncommon finding. In cases of complete atresia, a plain film of the abdomen shows that no air has passed into the gastrointestinal tract, a finding of rather diagnostic significance. By the oral administration of either lipiodol or barium solution the level of the obstruction can be clearly visualized. The same thing may be accomplished by passing a soft rubber catheter into the esophagus.

In partial atresia, or hypoplasia, of the esophagus the child may be asymptomatic up to the time until he reaches the age when solid foods are added to his diet. These babies appear healthy and well nourished. Blockage of the narrow passage with particles of solid food, of course, is responsible for their choking symptoms. Use of fairly thick barium solution may be necessary to demonstrate this condition.

Tracheo esophageal fistula occur more often than either complete atresia or hypoplasia. There are several variations, how-

mon type is a blind upper segment of esophagus with the lower segment communicating with the lumen of the left bronchus. The occluded portion of the esophagus is merely ever, to this same condition. The most common a fibrous cord. The type most amenable to surgery, however, is the kind in which a segment of the esophagus is hypoplastic with a small fistulous opening either in the trachea or left bronchus. The use of barium in the study of esophageal pathology has been condemned because of possible aspiration of this irritating substance into the bronchial tree and the use of lipiodol has been recommended. Aspiration pneumonia is the real danger in these children. Gastrostomy done as a preliminary procedure to feed the child is mentioned only to be condemned as it does nothing to prevent the lung infection, which causes the child's death. Resection of the fistulous tract with re-establishing the continuity of the esophagus is the only hope for these babies.

Diverticula, either the pulsion or traction type, are seldom encountered in the early years of life, although, some have been reported.

The short esophagus is associated with the intrathoracic position of the stomach. This condition so closely simulates herniation that it may be rather difficult to make the differentiation. Pressure of the distended esophagus and intrathoracic stomach on mediastinal organs may be responsible for the respiratory and digestive symptoms in these patients. The diagnosis may be made or suspected on a chest film showing a fluid level capped by air in the retrocardiac area. Use of the barium meal will help confirm this impression. Plastic repair for the short esophagus is a more formidable procedure than for a hiatus diaphragmatica and is less apt to be corrected by surgery.

Anomalies of the diaphragm may remain undiagnosed until necropsy examination or incidentally during adult life. Traction or

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pressure of displaced organs on the circulatory or respiratory system may give rise to rather serious symptoms in the infant. Eventration or high position of one leaf of the diaphragm has to be confirmed by fluoroscopic examination and probably is seldom if ever responsible for any symptoms. Hiatus diaphragmatica and partial or even complete absence of one leaf of the diaphragm may be suspected and even diagnosed on a plain chest film when displaced abdominal organs are recognized within the thoracic cavity. Use of contrast media will help in classifying the details of the condition.

Foreign Bodies: Round foreign bodies with a flat surface like coins, tokens and buttons, lodged in the hypopharynx assume a position with their longest diameter in the lateral position in contrast to those caught in the larynx which assume an antero-posterior position. Sharp foreign bodies such as pins, bone fragments and the like may pierce the mucous membrane of the esophagus and penetrate the outer wall. Danger of infection of the periesophageal tissue and mediastinal structures pursues a fulminating course. Opaque foreign bodies may be easily detected by either fluoroscopic or radiographic examination. Non-opaque objects may require barium or cotton pledges soaked in barium for demonstration.

Dysphagia lusorum due to a persistent right aortic arch or left sided origin of the right subclavian artery are encountered rather infrequently and do not permit discussion in this paper.

Cardiospasm is, likewise, rarely found in infants and young children.

Chronic ulcerative esophagitis — is only too commonly seen in young children and is usually due to ingestion of lye or other caustic materials. In these cases stenosis involves all, or the greater portion, of the esophagus with one or more places where the lumen is irregular and more narrow. These x-ray findings may be difficult to detect in early cases before fibrosis has replaced the ulcerated areas in the mucous membrane. Extent of involvement may be visualized by examination with contrast media. Results attained by dilatation may, likewise, be evaluated by using this same method of examination.

Stomach: Congenital hypertrophy of the pylorus is probably the most common affliction of the stomach and is due to a heavy circular muscular layer which impinges and narrows the pyloric canal. A secondary

thickening of the gastric mucosa due to irritation further encroaches on the lumen of the pylorus so as to tend to make the obstruction more complete. This condition usually appears about the third to the tenth post-natal period and in many cases the clinical diagnosis is clear cut with the typical symptoms and a palpable epigastric mass. Atypical cases present somewhat of a problem and demonstration of an elongated narrow pyloric canal with retention of barium in the stomach after a five hour interval or longer in a dilated stomach help to reach a correct diagnosis. This condition has to be differentiated from pylorospasm essentially by the fact that in the latter cases—hypermotility of the GI tract with rapid emptying of the stomach takes place once the spasm is relieved.

Peptic ulcers are rare and probably asymptomatic in young children and infants. We have seen two cases of spontaneous rupture of the stomach in newborns and in each case no cause for this could be found on necropsy examination.

Neoplasms of the gastro-intestinal tract are very rare in the infant.

Foreign Bodies: Smooth and round foreign bodies if not too large may be permitted to pass through the G. I. tract. Sharp pointed objects such as pencils, nails, bobby pins and needles should be removed immediately to prevent either further impaction or perforation.

Bezoars are sometimes encountered, especially the phytobezoars in the Southwest. Eating of unripe persimmons with congelation when they come in contact with the hydrochloric acid of the stomach is a real danger. If the bezoar is of a long standing-pressure ulceration may occur with the attendant danger of perforation. These bezoars when examined with a barium meal present a large filling defect not unlike a large fungating neoplasm. Emptying time film with the outer layer of the bezoar coated with barium makes it more easily detectable.

Small Intestine: Duodenal ulcers, if they do occur, must be a rare disease in children.

Atresia and hypoplasia likewise are seen of the small intestine and most often involve the ileum. The x-ray findings in these cases may be those of either partial or complete intestinal obstruction as seen on plain films of the abdomen. Since obstruction causes vigorous and complete evacuation of bowel contents below the level of obstruction, that portion of the tract becomes collapsed. Prox-

imal to the point of obstruction rapid accumulation of liquid and air causes distention of these loops filled with liquid and gaseous contents. If the obstruction is suspected anywhere in the colon, examination by means of a barium enema will clear up that point. The administration of barium by mouth in these cases is dangerous and contra-indicated as it may cause a partial obstruction to become complete.

In cases of paralytic ileus both the large and small intestine are distended with air.

It is well to remember that in very young babies it is not unusual to find air in the small intestine normally. Malrotation of the colon, where the small intestine lies on the right side and the colon on the left, the mesenteric attachments in this condition predisposes to volvulus of the small intestine.

Intussusception—the most common type is the ileo-cecal in which the ileum invaginates into the cecum. The bloody mucous diarrhea and a palpable abdominal mass should direct one's attention to this diagnosis. The site of obstruction can be demonstrated by use of a barium enema, with visualizations of the ingested gut. Intussusception is the most common cause of acquired intestinal obstruction in the infant and it is well to remember that; the reduction may take place spontaneously, or it may be reduced by the barium enema and that this does not correct the underlying causative condition.

I have been very unsuccessful in either demonstrating or identifying a Meckel's diverticulum in very young patients. Neither, have I seen a case of tuberculous enteritis, although, it probably does occur in cases of miliary tuberculosis.

Colon: Situs inversus, non-rotation or malrotation of the colon permitting the location of the appendix anywhere in the abdomen assumes real importance in cases of acute appendicitis. In one case examined, although, this boy has two appendectomy scars in the lower right quadrant we were able to show the cecum in the left side of the thorax due to congenital absence of the left hemidiaphragm.

Atresia and hypoplasia of the colon is less common than is found in the small intestine and usually involves the rectal or anal canal. In some cases only a thin septum

separates the anal and rectal canals, whereas, in other cases the defect may be more extensive. In these cases a flat film of the abdomen will give the signs of low intestinal obstruction. Examination of the perineum is a more simple and satisfactory method of examination. A more valuable film is one taken with the baby in an upside down position with an opaque object resting in the anal dimple. Thus, the air in the colon rises to the highest point giving an approximate extent of the involved segment. Collection of meconium in the lower blind pouch, however, may not permit the air to clearly demonstrate the true extent of the stenosis. In cases of stenosis of the rectum communications with the genito-urinary tract or perineum exists in about fifty percent of the cases. In these cases the fistulous tract should be injected with some opaque media to demonstrate the communication with the colon.

Megacolon or Hirschsprung's disease is usually due to congenital obstructive malformations of the colon, especially in the region of the rectosigmoid area. In more recent years neuromuscular imbalance with over activity of the sympathetic and under-activity of the parasympathetic has been emphasized as the underlying cause. Hypertrophic elongation and dilatation of the colon develops progressively. This can be easily demonstrated by examination with a barium enema. Films taken after evacuation show almost complete retention of the enema and therein lies a real danger—steps should be taken to remove the barium while it is still in a liquid state—rather than to let it dry and cake, adding considerable to the patient's discomfort.

Single polyps in children are not uncommon and when suspected should be demonstrated by use of double contrast media. In examining a patient suspected of having a polyp, thorough cleansing is a necessary prerequisite as a piece of fecal material may be very deceiving. The barium enema should be followed by air injection after evacuation of the enema. In this way the polyp coated with barium and surrounded by air can be visualized.

Many other conditions have been omitted — in order to show those afflictions which are most often seen.

SURGICAL LESIONS INVOLVING THE BRAIN IN INFANCY*

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The incidence of lesions involving the brain in infancy is fortunately low. Several factors contribute to this low incidence. Prominent among these is the remarkable regularity with which the process of organogenesis is completed, resulting in birth of normally developed babies. Many of the conditions encountered in late childhood and adult life arise either with the passage of time, such as the growth of neoplasm, or with the passage of years the exposure to traumatic episodes will be increased, and the occurrence of intracranial complications of infection of near-by structures or from distant points must be considered. In spite of this encouraging perspective, we do have these lesions with us and should remain open minded and receptive to the possibility when dealing with the infant's problems.

Briefly, I wish to present a few of these problems, in which by reason of the history or physical findings, the diagnosis will be obvious. Of these, the most striking is the patient with cranium bifidum. This lesion most often occurs posteriorly in the suboccipital or parietal region. Less often the defect may be in the frontal region or even within the nasal passage. When not associated with a protruding mass, a simple cranium bifidum may escape detection or be confused with a persistent open fontanelle. We have observed a dural lesion as a flat glistening membrane two cm. in diameter surrounded by a patch of unusually long hair. This defect was of course limited to the covering of the brain and its repair gives a good result. The protrusion of the dura, termed meningocele, even though it reaches considerable size, responds well to surgical repair. The sac is filled with cerebro-spinal fluid. It transilluminates readily and tends to expand with crying or straining (Fig. 1). Ingraham¹ suggests that passage or nasopharynx, these tests and possibly the additional precaution of aspiration should be applied in excluding a men-

ingocele before resorting to a direct surgical attack as one would do in treating a nasal polyp. Cranium bifidum, with protrusion of brain tissue, has been designated as encephalocele. The result in repairing these lesions, of course, depends upon the degree of brain involvement. One cannot hope to restore function to the mal-developed portion of the brain. The defect may be such that surgical repair is out of the question, as will be evident in the accompanying slide (Fig. 2).

The traumatic lesions are also quite obvious. A depression at this time of life frequently results in the bone bending inward without fracture and because of its resemblance to a dent in a ping-pong ball, it has come to be known as a "ping-pong fracture." Sub-galeal hemorrhage will produce a false impression of depression because of the palpable induration of sub-galeal tissue about the margin of the hematoma. By careful palpation the regular contour of skull can be verified and x-ray studies will of course exclude fracture. Compound fracture will of course offer no diagnostic difficulties. The chief problem is to prepare the patient for surgical repair as promptly as possible in preventing more extensive damage of brain tissue and avoiding infection. Restoration of the brain covering, according to anatomical layers, is the objective and one therefore must determine the extent of damage of the dura and brain by inspection both before and at the time of surgery. Two of the most extensive compound fractures of the skull in infants that have come to our attention were with the group of patients treated following a local tornado in 1945 and the Woodward tornado in 1947.

Brain abscess complicating penetrating wounds of the cranium, although rare, should not prove to be a difficult diagnostic problem. The presence of the penetrating wound would suggest the location and character of the lesion since infection must always be considered as a complication of a penetrating wound. In one instance in our series, a frontal lobe abscess developed fol-

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lowing an injury from puncture of the scalp by the sharp tip of a rooster's spur. In another a shingle nail penetrated the right temporal lobe when the child fell on the nail. Metastatic abscess occurring as a complication of septicemia will give rise to an expanding process with intracranial pressure and focal signs depending upon its location. The symptoms are therefore not unlike those of tumor that will be described subsequently. Intracranial abscess once formed may show little evidence of inflammation as we ordinarily think of signs of inflammation. The temperature is prone to be normal or subnormal and the pulse slow. In addition, it has been my observation that small children are apt to show less febrile reaction with menigeal and brain infection than older children and adults. With the advent of sulfa drugs and penicillin the incidence of intracranial infection has decreased, of course, but in spite of this, surgical drainage or removal of the abscess as described by Fincher⁵ may be necessary.

Hydrocephalus has long been recognized as a complication of spina bifida with myelomeningocele. The mechanism producing hydrocephalus in these cases remained obscure until within recent years. Russell and Donald², D'Errico³ and Penfield and Coburn⁴ have contributed to the literature and have pointed to the work of Arnold (1894) and Chiari (1895) in which a deformity of the medulla, cervical cord and cerebellum combine to produce an obstruction of cerebrospinal pathways in the region of the foramen magnum. Although the lesion had been treated surgically as early as 1932 it remained for D'Errico to successfully apply this procedure, which he described in 1939. He reported eight cases treated by decompression of the upper cervical canal

and lower suboccipital region. Incision of the dura and release of adhesions will aid in re-establishing pathways to permit the fluid to pass upward in the subarachnoid space to the absorptive points in the parasagittal region. Our experience leads us to take a conservative attitude relative to results in this type of case but to have learned of the nature of this lesion and offer this additional step in overcoming a complication of this type will undoubtedly save many patients from irreparable damage that has been known to occur in these cases. Fig. 3).

The patients with tumor, subdural hematoma and hydrocephalus other than that associated with spina bifida, present a distinctly different problem. Almost without exception they are looked upon as hydrocephalics and unfortunately there is a tendency both within and without the profession to assume a degree of pessimism that contributes to the defeat of our objective. Methods for investigation of these cases will enable one to arrive at a reasonably high percentage of accurate diagnoses and fortunately a goodly number of patients will be found with curable lesions. Regardless of type of lesion an increase in intracranial pressure develops and in this age group the sutures are not well united and the fontanelle remains open. For this reason enlargement of the head almost invariably occurs. The associated symptoms vary, but often convulsive seizures are a major complaint. Vomiting occurs in 50 per cent of cases. Feeding problems, irritability, restlessness and crying frequently occur. One readily recognizes that these symptoms may accompany a number of conditions encountered within this age group. What then is the most constant sign that is peculiar to the intracranial lesion giving rise to these

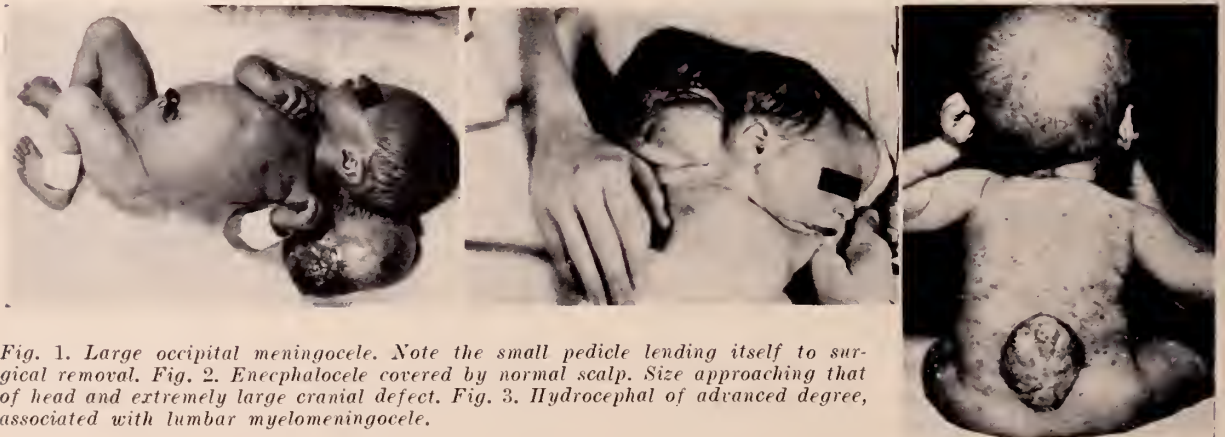


Fig. 1. Large occipital meningocele. Note the small pedicle lending itself to surgical removal. Fig. 2. Encephalocele covered by normal scalp. Size approaching that of head and extremely large cranial defect. Fig. 3. Hydrocephalus of advanced degree, associated with lumbar myelomeningocele.

symptoms? In review of our cases, regardless of the underlying cause, the complaint is enlargement of the head! One may elicit the history of increasing prominence of the anterior fontanelle and engorgement of scalp veins, but actual increase in size of the head will more often be the obvious change and be given as the chief complaint that brings them to the physician. This is apt to be detected by the physician in attendance or by relatives who see the child at intervals rather than daily. An insidious change may escape detection by the parents in their daily contact with the baby. In the study of these patients, one is handicapped by the individual's poorly established functional responses, and by his inability to voice his complaints. On the other hand, one avoids the pitfall of being "taken in" by false interpretation of disturbed function and overemphasis of inconsequential symptoms, which is often the case in the adult patient.

Careful physical examination is a major factor in diagnosis in the case of the enlarged head. Measurement of the head and comparison to the chest circumference will help in determining an actual enlargement in a borderline case. Up to the age of one year, the head circumference remains approximately equal to the chest circumference. Inspection reveals actual bulging of the scalp in the region of the anterior fontanelle, with increase in intracranial pressure. Distention of the scalp veins, reaching a marked degree, will frequently accompany the enlargement of the head. By palpation, the increased tension at the fontanelle may be detected and on percussion a fluid wave may be detected and a hyper-resonant note

elicited, referred to as Macewen's sign. It has been our experience that choked disc is not prone to occur in these patients, because of rapid expansion of the cranium from the intracranial pressure. Furthermore, when a choked disc is present, the lesion is more apt to be a tumor but occasionally a subdural hematoma may also produce this phenomenon. Communicative or congenital obstructive hydrocephalus rarely produces a choked disc. X-ray studies at this time of life will rarely reveal a tumor shadow or show changes other than separation of suture lines. An asymmetry of the head may be verified as an asymmetry of the skull itself by study of stereoscopic views of the skull.

Neurological study is of course important but will rarely yield significant localizing signs. More often changes detected will be those resulting in alteration of function by the ventricular enlargement, the thinning of the cortex and white substance and influence on the function of basal ganglia and cranial nerves. We have now adopted a procedure for investigation that has become routine in these cases. It combines the exploration of the subdural space by anterior fontanelle puncture with ventriculography. The scalp is prepared by shaving over the region of the anterior fontanelle and under aseptic conditions a spinal puncture needle is introduced through the scalp and dura. Just as its point enters the subdural space blood or blood tinged yellow fluid will escape or may be withdrawn by aspiration in the case of subdural hemorrhage. Bilateral exploration should be resorted to because of the frequency of bilaterality of the lesion. In a

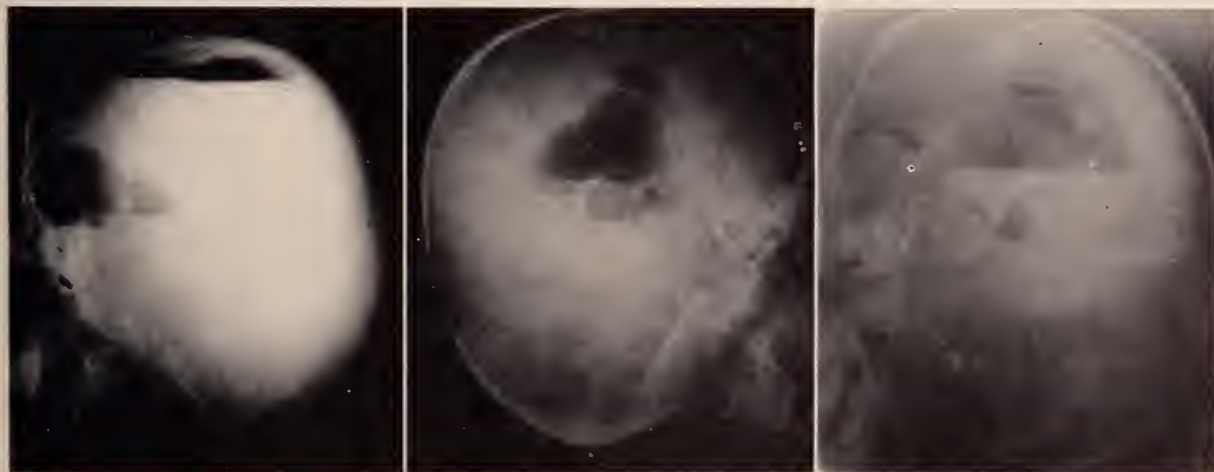


Fig. 4. Marked enlargement of entire ventricular system. Air has not escaped from the markedly dilated fourth ventricle. Fig. 5. Obstruction of lower end of aqueduct of Sylvius by extremely large tumor filling and enlarging the fourth ventricle. Fig. 6. Air has passed through the aqueduct and is seen in a crescent overlying the fourth ventricle tumor. Ventricular enlargement had permitted escape of fluid around the gradually enlarging papilloma of the choroid plexus.

few instances repeated aspiration has sufficed to relieve the condition but more often an osteoplastic craniotomy is necessary.

In the event that fluid is not encountered in the subarachnoid space, the needle is turned to a vertical position in relation to the scalp and advanced until the ventricle is entered. One may estimate the thickness of the overlying brain tissue. This unfortunately may vary considerably over the convexity and give little information as to the condition of the hemisphere as a whole. As a rule 60 cc. of fluid will be replaced with air and a series of x-ray plates are made to determine the size, shape and position of the ventricles and to determine also the patency of the system along the normal route taken by the fluid in passing from the lateral ventricles through the third ventricle, aqueduct of Sylvius, fourth ventricle, posterior fossa, cisternae and subarachnoid pathways. By this method congenital defects within the brain itself may be demonstrated and obstruction due to congenital atresia of the foramen or of the aqueduct can be diagnosed. Obstruction by a tumor within the ventricular system or encroaching on the ventricle becomes evident. Moderate febrile reactions are frequent but with a moderate volume of air no serious complications have resulted and the information obtained is of untold value in choosing the proper surgical approach and in checking the progress of the case postoperatively.

The operative procedures employed depend of course on the condition as revealed by ventriculography in addition to the physical and neurological findings. We employ a rather small osteoplastic craniotomy bilaterally for the evacuation of fluid from a subdural hematoma. After fluid has been removed and the cavity washed repeatedly with saline, a large patch of the visceral neomembrane has been removed in preventing refilling of the cavity. We now employ a technique devised by Torkildsen to by-pass a congenital atresia of the aqueduct of Sylvius or in inoperable tumors of the third ventricle. This is done by introducing a rubber catheter into the lateral ventricle in the posterior parietal region and as suggested by Swanson⁶ passing it extradural downward to the cisterna magna. There through a separate surgical exposure the end is secured within the cistern to allow fluid to pass onward to its point of absorption. One must also make an opening through the interventricular septum in case the foramen

of Munro is blocked. In a recent case the ventriculogram revealed an enlargement of the entire ventricular system but the air did not pass beyond the fourth ventricle (Fig. 4). This was approached by a suboccipital exposure and the removal of an opalescent membrane covering the lower portion of the roof of the fourth ventricle. This case did not show an elevation of the external and internal occipital protuberance, an x-ray finding reported by Taggart⁷ as being pathognomonic of the congenital obstruction of the roof of the fourth ventricle. The treatment of tumors of course depends on the location. A very large left cerebral cyst associated with a massive fibroblastic tumor required a large osteoplastic flap. A large papilloma of the choroid plexus lying within the body of the right lateral ventricle was removed piecemeal through a three cm. osteoplastic flap. This benign tumor measured 4 x 4 x 6 cm. but did not obstruct the ventricle or give signs of its location because of the associated hydrocephalus and the enlargement of the ventricular cavity to accommodate the mass. Those lesions within the posterior fossa are approached by a suboccipital craniectomy. Two of the three encountered in this group of cases were within the vermis and the fourth ventricle had been occluded by expansion of the tumor. (Fig. 5). The other was a benign papilloma of the choroid plexus within the fourth ventricle. (Fig. 6). Four of the above five tumor cases have survived variable periods from one to five years. The other expired within a few hours after the craniotomy was completed.

The communicative hydrocephalus frequently requires operative intervention in an attempt to reduce spinal fluid production to equal the absorption which presumably is markedly reduced. Removal of or destruction of the choroid plexus has been advocated and used for a number of years. We prefer to expose and coagulate the choroid plexus within the lateral ventricle. Occasionally one may reach the major portion of the plexus within the opposite ventricle, through a pre-existing or operative defect in the septum pellucidum. If one succeeds in ablation of a sufficient amount of the choroid plexus, the result may be favorable. We must keep in mind that this, if successful, will arrest the process and control the growth of the head, but will not restore function to those parts of the brain that have already sustained irreparable damage. It is therefore desirable that a decision be

reached early, to avoid the destructive process of ventricular enlargement.

The technique of the various surgical approaches to the lesions above described has been recorded elsewhere and need not be repeated at this time. I do wish to point out two major factors in the performance of a successful operative procedure in one so small and with so little general reserve. As a preliminary to each procedure as advocated by Ingraham⁸, we expose a vein, introduce a suitable cannula, which is secured in place by ligature, and maintain a steady but gradual flow of fluid intravenously. Then with loss of blood or evidence of shock, blood or plasma can be given promptly. Frequently there is too little time to prepare for this when signs of distress become evident and the collapse of circulation further handicaps the administration of fluid. The other factor is that anesthesia be light at all times, and supplemented with local anes-

thesia, which, surprising as it may seem, often suffices for most of these procedures.

SUMMARY

A brief consideration of the various types of surgical lesions encountered in infancy has been presented. Pertinent points in diagnosis have been outlined. The surgical approach to various lesions has been mentioned and supportive aids during the operative procedures stressed as major factors in successfully completing the operations.

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INDICATIONS FOR VARIOUS OPHTHALMIC OPERATIONS*

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Every year in our private practice, cases come to our office through reference for certain ophthalmic operative procedures. Often there is a misunderstanding on the patient's part as to the most opportune time when these procedures should be instituted. I wish to submit to you the data that we have collected over a number of years which has proven very satisfactory as a key to advising patients in various ophthalmic operations.

CATARACTS

The most common type of cataract is that which is senile in origin. Regardless of whether it is from normal or premature age, as a disease such as diabetes, the indications for operation are the same. The patient usually complains of blurred vision and seeing better in dim lights. Also that car lights cause a considerable amount of dispersion and annoys them greatly. As the lens opacity progresses not infrequently they will tell you that they can now read without glasses, or have what is so-called "second eyesight."

This is due to the enlargement of the lens which produces artificial myopia.

When the patient is refracted and is given a glass that enables him to read and carry on his occupation that is all that they can ask for. When they get so that they have difficulty in reading or carrying on in their industrial field, and the cataract is present, that is the indication for surgery. We do not have to wait until the lens becomes mature. If a patient has one eye which is quite useful and which enables him to read or carry on with his endeavors, and a cataract on the fellow eye, an operation is not indicated in this type of person, unless you suspect that the lens opacity in the good eye will increase very rapidly, or the individual wants the cataract removed for cosmetic reasons.

Traumatic cataracts are very tricky and a lens that is mature and looks like an ordinary senile or soft cataract can cause you a great deal of difficulty at the time of removal, such as a dislocated lens, hemorrhages, post-operative cyclitis, etc. One must be very careful in deciding upon whether to

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remove a lens that is caused by trauma for the above reasons. If the eye is kept consistently irritated in the form of iritis from injury as lens material is free in the anterior chamber, or the presence of glaucoma due to the swelling of the lens, it is advisable to remove the lens.

Congenital cataracts are usually best handled about the eighth or ninth month, depending upon the type of cataract and the physical condition of the baby. Some of the smaller posterior polar cataracts or nuclear type of cataracts can adequately be taken care of by an iridectomy or, in other words, making a new pupil.

GLAUCOMA

As you all know, glaucoma is one of the most disastrous conditions that we have in the ophthalmic practice when it comes to the statistics as to the cause of blindness. Invariably undiagnosed glaucoma will result in the total loss of eye sight within a few months.

There are two sides as to the treatment of glaucoma after its diagnosis is first made. One group represents those who adhere to the use of miotics such as pilocarpine, eserine, prostigmine-bromide, etc. The feeling of the men who advance the use of drugs is that too many eyes are lost through operation and many of them feel that the patient will eventually go blind and why not let them do so under the use of drops and not expose them to surgery. The other group believe that as soon as a case of glaucoma is diagnosed, or very shortly thereafter, and if they have major visual field changes, that some type of surgery should be instituted. There are various operations that are designed for different anatomical eyes and types of glaucoma. At this time the choice of operations will not be gone into.

We adhere to the latter group, or the one which advocates early surgery. It has been our experience that people who have early operations retain their eye sight a great deal longer than those who use drops. We further believe that it is impossible for a patient to use drops four or five times a day for the rest of his life and that when he misses the drops for several days the pressure goes up in the eye and causes further atrophy of the nerve. He also builds a tolerance to the drug and often an allergic manifestation. I can sincerely say to you that when you have referred a case of glaucoma to an oculist that you should inquire, "Why doesn't this

man have surgery?" Of course, there are certain types of glaucoma, such as hemorrhagic glaucoma, that resist any type of treatment, either surgical or medical. These are decidedly a problem for the ophthalmologist.

DETACHMENT OF THE RETINA

Detachment of the retina 20 years ago was a hopeless situation as far as eye sight for the patient was concerned, but with the advent of the electrocautery puncture, and then the use of diathermy and galvanic currents, we can produce a self-induced traumatic chorioretinitis over the area of detachment in which there is usually a retinal tear.

One of the early complaints that the patient will exhibit even before loss of vision or a sector of the visual field is recurrent flashes of light to the affected eye. Then, usually, they will complain of a loss of part of the visual field or central vision. Anyone that comes to you complaining of spots in front of their eyes or flashes of light should be thoroughly investigated before they are released with a diagnosis of eye strain or some refractive condition. Seventy per cent of the retinal detachments are caused by trauma, whether they be severe or very minor. The general rule is, as soon as a detachment is diagnosed the patient should be hospitalized and operated. The average results throughout this country are that about 50 per cent of them regain useful vision and the other 50 per cent have vision reduced to light perception or total blindness. The longer a patient waits after his detachment becomes apparent the less effective will be the operative procedure in gaining useful vision. It is absolutely a waste of time to have the patient remain flat on his back the first week in order to find out how much of his retina will fall back in place. The surgeon knows well enough now that if his patient has a detachment, he either must get busy in the operating room or let the patient be resigned to losing his vision in the affected eye.

STRABISMUS

Squints in childhood usually occur within a few weeks after birth or about the second to fourth year of life. It is very difficult to institute treatment of any value in a child until he is old enough to talk to you and understand about wearing a patch over the better eye to make him see out of the poor eye, or to start him on simple exercises before surgery is instituted. The above procedures will aid in straightening the eyes

of about 75 per cent of the cases that are encountered. Obviously, if these procedures are not successful, surgery will have to be resorted to. It is highly desirable that the child have two straight eyes — preferably without the use of glasses — by the time he enters first competition, and first competition means the first year in school. Usually we do not operate on these children until they are four or five years of age.

There is one type of squint which is known as convergence fixis, or a fixed convergence, where both eyes turn in 35° to 45° , and there is very little or no external rotation. These children have an abnormally heavy internal rectus and check ligaments. It is best that a recession of both muscles should be done by the time they are a year to 18 months old. It is very gratifying to the surgeon to see that such a marked degree of squint can be corrected with such a small amount of recession. If these children are allowed to wait until they are 10 or 12 years old when the internal rectus takes on the characteristics of a spastic muscle and the antagonists, or external rectus, becomes very flaccid from the long period of inactivity, the operative procedure involves much more work and results are far less gratifying.

It is your duty to see that your little patient has his eyes parallel by the time he is six or seven years old. I might add, if a youngster is allowed to wait until he is 17 or 18 years of age before operating, it is practically impossible to develop fusion or simultaneous macular perception. The fusion center is a mid-brain function and develops between the second and fourth year. You should further check to see that the child has had adequate exercises either before or after surgery.

To deal briefly with paralytic squints we will take, for example, the traumatic paralysis of the sixth nerve or external rectus. When these people cease to have improvement of the lateral rotation of the eyeball then surgery should be instituted and that means that the maximum return of function of the external rectus is usually completed within the sixth to ninth month if it is ever going to be completely rehabilitated. If these individuals are allowed to wait three or four years following their paralysis they develop a very spastic internal rectus muscle and their post-operative results are not nearly as effective in aiding external rotation as if they were operated on when the externus reached a point of maximum recovery —

that is, within six or nine months after the onset of the paralysis.

DISORDERS OF THE LACRIMAL APPARATUS

One of the most discouraging conditions that we see in ophthalmology is a little youngster, who comes to you at the age of eight or nine months and has a bilateral purulent dacryo-cystitis or bilaterally infected tear sacs. As you may recall, the tear duct is the last duct embryologically to become patent. The salivary ducts, ureters, etc., are normally all ready to work before birth. The lacrimal duct does not open up into the nasal mucosa until about the eighth month. A new-born baby has very few tears and tears do not become a function until the baby is a month or six weeks old, that is usually the time that the mother will inform you that the baby tears more or less continuously out of one or both eyes. It is very easy to establish whether the lacrimal passages are open. The simplest method is putting in drops of one per cent mercurochrome or any other stain, first in one eye for two or three days, and then in the other eye for a similar length of time, and observing whether the stain comes through the nasal passages or is seen on the posterior aspect of the tongue. If you find out that one or both ducts are obstructed you can advise the mother to use pressure three or four times a day over the lacrimal sac, pressing toward the tip of the nose. If this fails to open up the lacrimal duct, it should be probed. The closing of the lacrimal canal is practically always at its entrance into the nasal passage and a probe that is gently and accurately placed will encounter the blockage with a feel or resistance and then the probe is passed through the obstruction. There is hardly any procedure that is as satisfactory as this in our field of endeavor and if this is not done early and the child is allowed to develop a chronic dacryocystitis it will result in complete occlusion of the lacrimal canal and eventually extirpation of the tear sac. The various fistulization operations and operations transplanting the sac into the nasal cavities, in the long run, are highly unsuccessful in children. However, they work satisfactorily in adults, because they do not have the tendency of developing a new bone tissue as effectively and rapidly as a child.

There are many other ophthalmic surgical procedures that should be gone into; however, time does not permit, and the reason for dwelling on the above conditions is that they are the most common ones encountered.

HYPERTENSION---Its Various Aspects and Treatment*

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By hypertension is meant the elevation of the vascular arterial tension above 145 mm. of mercury systolic pressure, and 90 mm. of mercury diastolic pressure. The systolic pressure may rise over 300 mm., and the diastolic pressure to 190 mm. of mercury. Patients with hypertension form the largest group of cases with heart disease the world over. The deaths from this disease are caused by congestive cardiac failure due to myocardial insufficiency, cerebral hemorrhage, coronary fatalities and renal insufficiency, in the order mentioned. It is still controversial whether there is a clear correlation between prolonged elevation of blood pressure, and the incidence of serious complications.

In the treatment of essential, or primary hypertension, it is reasonable to employ measures that will reduce the physiologic and psychologic stimuli producing the disease. It is desirable to have a scientific and sympathetic understanding of the emotional problems that are contributing factors early in the disease.

Therapeutic empiricism has been very prevalent in hypertension, and actually we are still not far advanced in our knowledge of essential hypertension and in its treatment. Numerous drugs of varying toxicity and doubtful value, hormones, tissue extracts, sedatives, and electrical treatments are being employed. More recently the surgeons have entered this field, stimulated originally by the animal experimentation of Goldblatt¹ and his co-workers. The treatment of essential hypertension is not a cure, but is a non-specific, symptomatic treatment which is very effective in the management of malignant, or severe symptomatic hypertension. A satisfactory direct therapy for the hypertensive vascular disease in man is as yet unknown for the reason that a definite cause has not been discovered. At some future time the explanation of hypertension may come from a definite understanding of the relationship of the adrenal-renal-vascular mechanism to kidney function and adrenal function in the metabolism

of sodium. The great majority, perhaps from 95 to 97 per cent of hypertensive patients have either essential or malignant hypertension, and it is in this group that the uncertainty of management is so manifest.

Many early or moderate hypertensive patients manifest symptoms of nervous hyperactivity, with resultant vasomotor spasm and increased peripheral resistance with hypertension which may be explained on the basis of a neuro-hormonal factor. It has not been determined whether or not a precedent neurogenic phase without hormonal influence exists, and ultimately results in a neuro-hormonal state. Psychotherapy may be successfully employed in the neurogenic or the functional stage of hypertension, where the hormonal factors do not play a part. Interviews with patients concerning their problems and personal conflicts need not necessarily be held by the neuropsychiatrist, but with the general practitioner who can render reassurance as to the possibility of living a normal life span, and explaining the normal variations of blood pressures under different conditions. It is well for the person to know that a healthy artery can withstand a pressure approximately 15 times that of the normal systolic pressure. Those in this phase should be advised as to the importance of adequate rest, relaxation, avocations and hygienic living generally. Periodic examinations should not be discouraged, but it is unnecessary to measure a patient's tension each visit, as it may cause undue concern. It is well to stress that no alteration of life is necessary other than that which is wise for anyone of his own age, provided he be over 45 years old and that his condition makes sensible behavior mandatory.

Thus far no specific dietary therapy has yet stood the test of prolonged clinical study. Recently the Kempner^{2,3} rice diet, composed mainly of rice, fruit and sugar, with low salt and low protein content is accepted, and many cardiologists report it effective. This diet is extremely monotonous and its palatableness depends to a great extent on the method of preparation and serv-

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ing of it. The addition of sugar and lemon juice make it more savory. The diet is salt free, contains 2000 calories consisting of 5 G. of fat, 20 G. of protein derived from rice and fruit, 468 G. of carbohydrate, and not more than 0.20 G. of sodium. Originally this diet was advocated in cases of diastolic hypertension with impairment of renal function, whether it was caused by glomerulonephritis or essential hypertension. Now it is advocated in all instances of hypertension, although it contains less than the current "standard" nutritional daily requirement of protein.

The low sodium diet advocated by Grollman⁴ supplies a larger amount of protein than the rice diet, and the sodium intake is less than .5 G. per day. The protein consists mostly of milk proteins. We must note that patients on low sodium diets, either that of Kempner or Grollman, may suffer from sodium deprivation, particularly during hot weather.

More recently Eugene Foldes⁵ called attention to the blood volume in relation to arterial hypertension, showing that increased vascular tension is definitely related to increased circulatory blood volume, and vice versa. Therefore, he advocated a diet aimed at the reduction of circulatory blood volume, namely, an anti-retentional diet, rich in protein, vitamins, and restricted to a greater or lesser extent in carbohydrates, fats, table salt and liquids. For an average size man under ordinary conditions Foldes' diet consists of 112 to 135 G. protein, from 150-260 G. carbohydrates, from 40 to 50 G. of fat, and from one to one and a half liters of liquids, with the smallest amount of sodium chloride compatible with the enjoyment of the meal. A reduction of the blood pressure resulted from the administration of this diet in a great number of his cases over a period of several years, dating back to 1944. Foldes further points out that when diabetes develops in the hypertensive patient, or when the blood sugar rises in the hypertensive diabetic, the blood pressure drops. And conversely, with the control of diabetes, the blood pressure soon rises to the previous high level. His explanation is that diabetes produces an effect similar to anti-retentional therapy, brought about by the loss of fluids from the body reducing the circulatory volume which occurs as a consequence of the glycosuria, with the attendant polyuria. With a glycosuria the adrenal cortex is suppressed with a diminution of its hor-

monal effect, since endocrines usually decrease their hormone output if such conditions prevail in the organism which the gland promotes, and vice versa. To corroborate this latter hypothesis, he reports one case of non-diabetic essential hypertension where intravenous glucose injections were followed by a drop in the blood pressure. He states that a drop in the blood pressure, which follows the rise of the blood sugar, outlasts the latter.

A rational course in the dietary management of hypertension would be to advise temperance in eating. One must evaluate all dietary management carefully before coming to a definite conclusion as to its merits. It must be emphasized that many patients with hypertension require caloric restriction as an anti-obesity measure. Obesity is a very deleterious factor in hypertension, since it places an increased load on the heart. This excess weight is living tissue, with a rich vascular bed which the heart must supply with nutrients.

In the treatment of hypertension benefit has been derived from various drugs. The most useful are those producing sedation, since they allay nervousness and combat insomnia. These medications should be changed at intervals lest the patient develop a tolerance to a particular one. Barbiturates, especially, are given with success since they reduce the pressor effects of emotional stimuli. The vaso-depressor drugs are still being used extensively. However, we continue to search for a suitable drug with a prolonged hypotensive action, and without toxic effects. Nitrides, iodides, Veratrum, pancreatic extract and renal extract, hormones, vitamins (A and E), have all been administered with disappointing results. Of the nitrites, Erythrol Tetranitrate and Mannitol Hexanitrate have been found to be most satisfactory, since their action seems to be somewhat longer. However, many cardiologists frown upon the use of depressor drugs on account of their evanescent effect, and because it is, psychologically, bad practice to give a drug which emphasizes to the patient the existence of the high blood pressure.

From the time that Barker introduced a method of assaying the blood concentration for Potassium Thiocyanate, the control of dosage has been greatly facilitated. The dosage of this drug varies considerably with different patients, and it is definitely contra indicated in cases with extensive cardiac or

cerebral vascular arteriosclerosis, in malignant hypertension, and in those with renal insufficiency. Toxic symptoms occur in about 20 per cent of the cases, and when mild, the drug may be repeated after a period of rest therefrom. It is recommended that the level be kept between eight and 12 mg., and should never exceed 15 mg. per 100 cc. Potassium Thiocyanate is especially beneficial in those cases having severe headaches and dizziness. The headaches are difficult to evaluate in hypertensive vascular disease, as this is such a frequent complaint in normal people. In a careful analysis of those with hypertension, surprisingly few complain of headache, and the usual causes of this complaint should be considered in all instances. Spontaneous remissions frequently occur when drugs are used in the treatment of hypertensive headaches. If they are persistent a lumbar puncture occasionally is helpful after other methods, such as rest, sedation, and vaso-depressor drugs have failed. Potassium Thiocyanate is best adapted to individuals below the age of 50, without arteriosclerotic changes.

More recently Tetraethyl Ammonium Chloride (Etamon)⁶ has been studied in reference to the reduction of hypertension. It has a highly depressive action on the sympathetic and parasympathetic ganglia, sensory nerve fibers, and also impairs motor function by its curariform activity. Some cases of dysarthria, dysphagia, ptosis, and finally, intercostal and diaphragmatic paresis have been reported. Dryness of the mouth and mydriasis which present themselves represent the inhibition of the parasympathetic components, while the almost universal presentation of the complaint of numbness and tingling suggest the involvement of the sensory nerve fibers. These actions of the drug, plus its ephemeral action and profound generalized vasodilatation, with marked drop in the systolic and diastolic blood pressures, preclude its use in the therapy of hypertension. Its diffuse activity in the human renders results obtained in the reduction of arterial vascular tension which bear no relationship to that following sympathectomy⁷. For this reason the initial enthusiasm in the use of this drug is gradually waning.

In 1946, Hite revived interest in Veratrum Viride, the drug used formerly in the treatment of eclampsia, its success being attributed to the vasodilative effect. Hite has shown that with a well standardized drug a fall in blood pressure results, because of peripheral

vasodilatation. This drug must be given uninterruptedly in order to exert a constant effect, and its action is brought about gradually within a period of weeks. The dose must be individualized, and it is not dependent on the severity of the disease. It is too early to pass judgment on the benefit that will accrue from the use of this drug.

The general opinion is that in a disease which affects the blood vessels, tobacco should be curtailed because of its vasospastic effect. However, the moderate use of alcohol has a salutary action because of its vasodilating properties.

In regard to the surgical treatment of hypertensive vascular disease, there is no agreement amongst various clinicians as to the types of cases which should be subjected to this operation. It is maintained by some that the operation should be restricted to those with advanced vascular disease and nephrosclerosis, for whom the prognosis is so serious that no other form of therapy is effectual. Others believe that this operation should be reserved for the earlier stages of the disease, since no benefit can be expected after extensive vascular disease is apparent. It has not yet been proved that patients submitted to this operation outlive those who have been spared. Although a sympathectomy produces an initial lowering of blood pressure, in the majority of cases the pressure tends to rise again, and the persistently lowered level in many instances may well be the result of an altered mode of living which follows such an operation.

With each advancing decade of life the prognosis is improved, and a patient over 60 with hypertension need not be treated primarily for high blood pressure, but attention in these cases is directed rather toward the maintenance of good cardiac function, adequate circulation and general well being.

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THERAPY WITH CHILDREN*

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Behavior problems for which children are referred to the physician constitute a source of distress to the parent, the school, or community at large. Seldom does the child regard his behavior as a problem. Rather, it represents his efforts toward the solution of a problem the specific nature of which he cannot understand. He does something which is frowned upon, and when questioned directly he can truthfully say he does not know why he did it. If he were capable of expressing himself adequately, he might say, "I need help. Something is missing. My needs are not being met in my efforts to grow up." Since he cannot see it in that light, his behavior says it for him. It is up to us to recognize that cry for help and do something about it.

The primary deficiency may lie in the physical sphere, the area of intellectual capacity or in the social and emotional spheres. Since any one of the many problems of behavior could conceivably have been initiated by an organic disorder, a comprehensive physical examination is first in order. An evaluation of the child's mental age, the level at which he is actually capable of functioning, will give clues to his unmet needs in a sizeable proportion of instances. Though findings of significance are discovered in either of the above two areas, and appropriate measures are undertaken toward correction, there generally are superimposed emotional problems which have by this time developed and in which area he will also require some help.

By far the greatest percentage of problems will be found to have originated in the emotional sphere, however, and it is this field with which this discussion will deal.

Treatment actually begins when the parent first comes in the office, preferably without the child, in her search for help. A detailed history, focused on the nature of the specific problem and ramifying into other aspects of the child's behavior, reactions, and the interpersonal relations with other mem-

bers of the family serves a dual purpose. It acquaints the physician with the child and offers several clues. It also is, in all probability, the first time that the parent's complete story has been listened to in its entirety with a sympathetic ear. Further, it serves to suggest and impress upon some parents that it is not just a problem of the child to be corrected, but that a constellation of the interpersonal relationships is involved. Direct suggestions to the parent are not ideally made at this first interview, unless the problem is one of normal behavior which has been misunderstood by the family and when it is not planned to see the child.

During the early period of the development of child psychiatry, changes in the behavior of children were regarded as following chiefly upon changes in attitudes of the parents and upon environmental manipulation. Educational and therapeutic efforts were directed primarily toward the parent. The nature of growth and participation of both child and parent in the child's development was not sufficiently appreciated. When the child was regarded as an individual who could be helped to grow and become a person in his own right, he was then included as a more active participant in the direct therapeutic procedure. Instead of being seen as an object to be changed, he was accepted as an individual with the capacity to change. Treatment procedures directed toward a reorientation of parental attitudes through an understanding of the child's emotional needs are still utilized with effectiveness; and so are other forms of environmental modifications. However, efforts are much more effective and gratifying with the realization and use of the concept that children with personality and behavior difficulties can be helped to help themselves.

The normal growth process entails the living through and enjoyment of each phase of development from infancy to adulthood. Problem behavior indicates an interference with this process. Therapy boils down to reorienting the individuals directly involved and helping to establish more ideal conditions

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for growth; or, to supply to the child the elements which are lacking, through a relationship with and support from the therapist. Direct treatment with the child is more than the application of techniques and giving of insight. It is a living and dynamic experience involving a relationship between two people, the child and the therapist. The patient must find new values in himself, not alone but in the relationship with another person.

The treatment procedure can follow one of or a combination of three methods. An authoritative approach may be used, with direct efforts to tell the patient what to do and to outline a plan of action for him. Suggestion, in all its forms and advice fall within the scope of this method. It obviously is the weakest of psychiatric techniques. A second approach is that which seeks causes through eliciting a historical background of the difficulties; bringing to consciousness the unconscious trends and conflicts and recreating the past in order to release the anxiety bound up with these experiences. The focus is directed toward what the patient was in order to help clarify the present conflicts. The third method is one which places emphasis on the immediate experience, helping the patient to grow in this dynamic relationship with the therapist. The past life history and its significance is naturally part of this last method. Dr. Fred Allen, one of our most skilled child psychiatrists has been a strong proponent of this latter approach and utilized it with great success.

The play technique in the therapeutic approach to children, or play therapy, is based on the fact that play is the child's natural medium of self-expression. The child can "play out" his feelings and problems, a process comparable to the adult's "talking out" his difficulties. Through his play the child reveals to the therapist his basic conflicts and anxieties, his aggressions, hostilities and guilt feelings. Through his ability to project upon a character in the play his own feelings and attitudes, he gains an understanding of himself. The child's expressions find acceptance from the therapist at all times, regardless of what he says or does. This frequently is unique for the patient, for he finds a person who is able to accept him just as he is.

Play materials should be simple and, so far as possible, unbreakable. Doll families, finger paints, soldiers, guns, finger or hand

puppets, cars, toy nursing bottle and dydee doll would constitute the important elements. In nondirective play, the patient would have complete freedom of choice as to what materials he might wish to use. In the directive approach, only those materials which the therapist wished to be used would be available. Some psychiatrists set up a situation in doll play for the child to work through. Many others follow the non-directive technique. The older age group, of 10 years and more, are more apt to select the puppets and put on a dramatization than they would be to use dolls.

An example of the directive approach is seen in the case of five-year-old Henry who had, for three months prior to appointment, been disturbing to his parents because of suicidal threats and gestures when frustrated. There were also temper tantrums over a longer period of time. There was an eight-month-old sister, with whom relationships were described as very fine by the parents. No jealousy was noted. In a doll play set up, patient had the baby killed by a rattlesnake which had entered the house during afternoon nap time. He then went on to describe that the snake had entered the house through a broken window in the boy's room, crossed through and into the baby's room directly. The boy knew the window was broken but had neglected to tell his father about it so it could be fixed. Thus, patient expressed his hostility to the baby which had been unrecognized by the parents, and at the same time revealed his own guilt feelings over death wishes for the baby. In the play there was also displayed some aggressive activity toward both parents. The patient's anxiety over these strong aggressive feelings, precipitated during periods of frustration at the hands of the parent, were so intolerable that self-harm was preferable. During the therapeutic procedure, patient revealed no outward signs of disturbance. His attitudes found acceptance with the therapist who was able to discuss further with the patient the natural hostility that might at times exist toward members of one's immediate family when angered.

Another boy, age four and a half years, was brought in because of fear of the dark which had developed over a period of six months. In a few play sessions, with characters and situations set up for him, he was able to bring out anxiety over feelings of hostility toward the father and to objectify

his fears in such a manner that he could handle them adequately.

Finger painting has assumed an important role as a psychotherapeutic technique. Advantages in its use include the fact that it requires very little skill and permits the use of large muscle groups. It can be used as a form of projective play, as a study of motility, and as a source of fantasies and free associations. As severely disturbed children become able to cope with their fears, they are also noted to improve in the explicit character of their paintings. It affords a medium for the release of aggression and hostility without serious danger of overdoing it. The patient is capable of destroying as well as creating, yet without actually being destructive for from the same material he is able to obliterate and create again. The manner in which the child paints, in restricted, stilted fashion or in an unlimited fashion will be indicative of the over-inhibited, fearful child or the uninhibited patient.

In the adolescent age group approach is generally through direct, verbal psychotherapy. The majority of such patients fall into two general categories, with presenting complaints of aggressive reaction, of rebellion in all its forms, or of strong passive-dependency reaction with overt feelings of inferiority, sensitivity and asocial trends. An appreciation of the child's reaction to excessive familial domination and lack of opportunity for the development of indepen-

dence will enable the therapist to stimulate discussion of pertinent issues in those who consistently avoid them. As an attitude of acceptance by psychiatrist is felt by the patient, the latter is rendered amenable to reorientation of views within themselves. They seek emotional support but veer away from direct advice. It has been found that they respond well to an objective approach toward understanding the parent as an ordinary human being with the usual human frailties and strengths.

In closing, it is desirable to indicate that the approach and technique used will depend on the capacity of the therapist to alter methods for the individual patient. The nature of the presenting complaints is not the determinant in selection of an approach for they all present the same general plea, "I want help in growing up." The general emotional support obtained by the child in the respectful relationship with an impartial and accepting adult is of greatest importance. The successful outcome of treatment is reached when he has found he can be the child he is in a relationship with an adult. The dignity of his own smallness can be the dignity of his own smallness can be the adult.

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TWENTY-FIVE YEARS AGO

Dr. A. J. Weedn, Duncan, is installing hospital facilities at Waurika in addition to those he has at Duncan and Marlow.

Drs. William Davidson and H. C. Manning, Cushing, are sporting a fine new suite of offices in the First National Bank Building.

Dr. E. L. Inman, Eakley, has removed to Apache.

Dr. B. T. Bitting, Enid, has located at Arapaho.

Dr. Carl Puckett, Pryor, has been appointed State Commissioner of Health over a large field of aspirants.

Dr. A. S. Nuckolls, Ponca City, was elected head of the Ponca City Hospital staff at the annual meeting December 24.

Dr. Henry S. Browne, Tulsa, and Miss Dorothy Malone of St. Louis, Missouri, were married at the Holy Family Catholic Church, Tulsa, on December 31, 1933.

Dr. Cary W. Townsend, Oklahoma City, City Health Commissioner, filed the first birth registration in Oklahoma City, for 1924, it being the record of the birth of his son, Cary Louis Townsend.

CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Pediatrics*

HOWARD C. HOPPS, M.D. AND GEORGE H. GARRISON, M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HOPPS: The case for our consideration today illustrates a common cause of death at our Childrens Hospital and presents some interesting problems in differential diagnosis. We're very happy to have with us Doctor Garrison to discuss and analyze the clinical findings.

PROTOCOL

Patient: D. W. D., 16 month old white male. Admitted December 9, 1947. Died December 11, 1947.

Chief Complaint: Stupor and fever.

Present Illness: This 16 month old child had been in excellent health until three weeks prior to admission when he developed "fever" and irritability. The next day he began to vomit; this continued several days and was associated with lethargy and a persistently elevated temperature. Four days following the onset a physician diagnosed "intestinal flu and virus pneumonia." Penicillin was given every 12 hours for two days without improvement. Finally, after two weeks, the child was taken to a hospital where penicillin therapy was reinstituted. His temperature at that time was 106° F. He improved somewhat, but on his second hospital day he refused food and acted as though his throat hurt, especially upon swallowing. He was thereupon transferred to Crippled Childrens Hospital.

Past History: He had had no diseases save for an occasional "cold" and no immunizations.

Family History: Non-contributory.

Physical Examination: Temperature 100° F. (R); Pulse 140, respirations 36/minute, shallow. The patient was a fairly well nourished infant who responded to stimuli only by grunts and movements of withdrawal. The eyes were open but unseeing. Skin was dry, warm and scaly, with poor turgor. Pupils did not react to light; fundi appeared normal. Ears and nose were negative. It was impossible to examine the throat adequately because of voluntary resistance to opening of the mouth; however, the gag reflex was ab-

sent. There was little, if any, rigidity of the neck. Lungs and heart were not unusual. Legs and arms resisted movement, knee and ankle jerks were active and equal. Babinski and Kernig were positive bilaterally. A thick, yellowish-green fluid was obtained upon lumbar puncture. It coagulated rapidly.

Laboratory Data: Urinalysis was essentially negative. The blood contained 8.5 Gm. per cent Hb., 4.4 million RBC's/cu. mm. and 26,000 WBC's/cu. mm. with 80 per cent neutrophils, 75 per cent of which were segmented, and 17 per cent lymphocytes.

Clinical Course: The temperature varied from 100° to 101° rectally. Despite therapy, there was no clinical response and the patient expired on the third hospital day.

CLINICAL DIAGNOSIS

DOCTOR GARRISON: This 16 month infant, according to the story, was perfectly well until three weeks before admission. The onset of his illness was abrupt, with fever and irritability, followed the next day by vomiting. Since these are perhaps the most frequent symptoms which accompany any childhood illness, their presence narrows our field of consideration but little. From this alone, we are not even able to determine whether the illness is of serious or trivial nature. The child continued with his vomiting, fever and, according to the record, developed drowsiness and stupor. This puts a different aspect on the case since any child who continues with fever, vomiting and lethargy for as long as three or four days must be considered to have a serious disease. On the fourth day of his illness a diagnosis was made of intestinal flu and virus pneumonia. Whether or not he had medical attention in the first four days if his illness we do not know. Whatever we say here about diagnoses or treatment we say purely for the benefit of discussion and not as criticism of any medical care or attention which this child may have received. We must remember that the patients (or parents) statements about their doctor's com-

ments are not always correct. I would hate to be responsible for having said all of the things that I probably have been quoted as saying. So far as I am concerned, I do not know what intestinal flu is. I know what the term is often applied to, but it is attached to so many varied types of illness that I think it cannot be used as a satisfactory diagnosis. Virus pneumonia is another one of those indefinite diagnoses which is applied to such widely varied conditions that it means little in circumstances such as these. The fact that this child was given penicillin suggests that a bacterial infection was suspected since penicillin is known to be ineffective in viral diseases. Each additional day of vomiting and fever described in the protocol increases our concern as to the seriousness of this child's illness and yet there is little to direct our attention to any specific disease without the development of "localizing" signs or symptoms.

At the time of admission to Crippled Childrens Hospital, the child was critically ill. To what extent this state reflected simply the combined effects of dehydration and acidosis cannot be determined from the general appearance alone. As we continue with the physical examination however, we come upon several positive neurologic signs. The pupils showed no reaction to light. Fundi appeared normal. His neck was not stiff but he had positive Kernig and Brudzinski reflexes. How is this to be interpreted? Did the child fail to show neck signs because of the prolonged time of illness, because of the toxic state he was in or because of the high degree of temperature? We do not know. We do know however, that where children are concerned, one cannot make a diagnosis on any single sign or symptom. This holds true for eruptive diseases, infections of the nervous system, pneumonia or chest infections of other kinds.

One has to be very careful in interpreting central nervous system symptoms and signs in infants and young children. Quite often positive Kernig and positive Brudzinski's reflexes may be obtained in a child of this age group who is without central nervous system infection. Children who have high temperatures may exhibit nervous irritability with resistance to flexion of the neck and with the positive neurologic signs we mentioned. This sometimes leads to serious error in diagnosis. It is better to be misled in the positive direction however, than to ignore such signs and miss an early diagnosis

of meningitis. In this instance we have a child who has been sick two and one-half weeks with high temperature, who had vomiting at the onset and with drowsiness and lethargy shortly after. At the time he came in here he had positive Kernig and Brudzinski reflexes. These findings in themselves are enough to make spinal fluid studies mandatory. Why this child went along for two weeks, or nearly three weeks before he came in here and whether he had positive neurologic findings before his examination here is a matter of speculation. You have read the protocol and you are told that at the time of the lumbar puncture the child had a thick, yellowish, green fluid. Again let me emphasize *that any infant, child or adult, who has the symptoms that this child had, warrants a lumbar puncture.*

When a spinal puncture is made in a patient with that group of symptoms which we have discussed one can make a tentative or a working diagnosis the moment fluid begins to accumulate in the test tube. There are two types of fluid that may be obtained: clear or cloudy. In the event that a clear fluid is obtained, one must reconsider whether or not there is simply meningismus or, if the central nervous system is infected, whether the illness fits in with those several types of infection of the central nervous system which give a clear fluid. The five conditions which ordinarily yield a clear spinal fluid are: (1) Lymphocytic choreomeningitis, (2) Polio, (3) Encephalitis, (4) Luetic and (5) Tuberculous meningitis. It is true that in the case of tuberculous meningitis of several weeks duration or longer, one might then recover a somewhat turbid fluid. Inasmuch as the spinal fluid in this case was yellowish-green one could, for all practical purposes rule out the five conditions listed above. What types of infection produce a purulent spinal fluid? Again, there are five major types to consider and these are: Meningococcic, streptococcic, staphylococcic, pneumococcic and influenzal infection. These account for practically all forms of meningitis which produce a purulent spinal fluid. We shall ignore such rare etiologic agents as micrococcus catarrhalis, the colon bacillus, etc.

Now, going back into the history of this patient, if he had been known to have influenza or pneumonia, one would consider first the possibility of influenzal or pneumococcic meningitis. The history in this case gives us no help on this score. Meningococcic

meningitis ordinarily runs a more abrupt course than this. If this individual came down suddenly, as he seemed to do, and carried on to the end of two or three weeks with a picture of meningitis and presented a very thick, purulent fluid, one could still consider the possibility of a meningococcic infection, however, and explain the unusual duration of illness on the basis of penicillin received early in the course of the disease and again toward the end of the second week.

Penicillin is the treatment of choice in meningococcic and other purulent types of meningitis, with the exception of influenza bacillus. Therefore, on the basis of probability, penicillin should be given as soon as purulent meningitis is recognized — without waiting for definitive bacteriologic studies. The method of treatment in this patient was not such as to most favorably affect the course of meningococcic infection however. Penicillin does not get into the spinal circulation very readily from intramuscular or intravenous injection, but requires direct injection into the spinal circulation to reach effective concentrations. With a spinal fluid such as is described here, the differential diagnosis is largely one of smear and culture. It doesn't help much to run protein determinations, chloride determinations, or sugar determinations, since they will not indicate which pyogenic organism is responsible. In meningococcic meningitis, it is not required that one obtain a purulent fluid. If the fluid is cloudy, and upon microscopic examination there is a predominance of polymorphonuclear cells, that is *presumptive* evidence of meningococcic infection, whether or not organisms can be seen in the direct smear.

In summary then, we should consider here that this whole picture, dating back to the onset of fever, vomiting, drowsiness and lethargy, probably represented a pyogenic infection of the central nervous system (meninges) the course of which was modified by penicillin. The specific diagnosis as to bacterial agent responsible, could be made only upon identification of the organism present in the spinal fluid.

CLINICAL DISCUSSION

DOCTOR HOPPS: Doctor Garrison, this is somewhat along academic lines, but if this spinal fluid had been clear and everything else the same, what would have been the probable diagnosis?

DOCTOR GARRISON: If this spinal fluid had

been clear, not turbid or cloudy, I would first have considered tuberculous meningitis. One would have to consider also the possibility of lymphocytic choriomeningitis, polio, encephalitis, and luetic infection. It is in differentiating between these that chemical analysis of spinal fluid is most helpful. Tuberculous infection characteristically gives low sugar and low chloride values and if these changes were observed, they would strongly favor this diagnosis. Of course the serology would help differentiate luetic infection. Ordinarily poliomyelitis would give rise to other signs, in the nature of muscular involvement, by the time that two and one-half weeks elapsed. At that time, spinal fluid might appear relatively normal. Encephalitis is a difficult diagnosis to make and depends largely on the clinical picture rather than the spinal fluid. There is usually some cellular increase with perhaps polymorphonuclears predominating, but this is not constant. There is not enough change in sugar to be of great value, in the average case of encephalitis.

QUESTION: In meningitis, is the differential white blood count of any value in differential diagnosis?

DOCTOR GARRISON: Not particularly except that a count above 20,000 (as in this case) indicates some type of purulent meningitis rather than a form of meningitis or meningeal involvement that gives clear fluid.

QUESTION: Is the type of cellular exudate in spinal fluid of value in differential diagnosis?

DOCTOR GARRISON: Lymphocytes predominate in lymphocytic choriomeningitis, and also in tuberculous and leucic meningitis. Neutrophils usually predominate early in the course of poliomyelitis. This gives way by the end of the second or third day (oftentimes before a spinal puncture is ever made) to a predominance of lymphocytes. In encephalitis, neutrophils usually predominate early, but may be replaced later by lymphocytes. The total number of cells is usually less in encephalitis than in other types of meningeal involvement which give clear fluid.

QUESTION: Is the yellowish-green color of the spinal fluid significant?

DOCTOR GARRISON: This is more commonly seen in a pneumococcic or influenzal infection but may also be seen in protracted cases of meningococcic meningitis.

ANATOMIC DIAGNOSIS

DOCTOR HOPPS: Ordinarily we do not withhold information obtained from the patient's

chart. This case is an exception to that general rule. We were well justified since by so doing we provoked Doctor Garrison to give the very excellent discussion of meningitis which he did. I shall read you that portion of the chart which we omitted which would have made the diagnosis perfectly clear. "Microscopic examination of the spinal fluid revealed pleomorphic Gram negative bacilli which gave a positive capsular swelling reaction with type B hemophilus influenzae. This same organism was grown on culture. Spinal fluid globulin was 4+, protein over 1,000 mg. per cent, sugar 66 mg. per cent. There were innumerable fresh red blood cells, 239 neutrophils. The patient was treated with streptomycin, influenza type B serum, sulfadiazene, fluids, and other supportive measures. The patient showed no response to treatment. On subsequent spinal taps very small amounts of fluid were obtained and there was other evidence of a block in the cerebrospinal fluid circulation also. Cysternal puncture likewise yielded no fluid." The diagnosis therefore was evident clinically and Doctor Garrison was quite correct in his conclusion that this was an essentially uncomplicated case of purulent meningitis. My reason for asking Doctor Garrison what his reasoning would have been had the fluid been clear was twofold. In the first place, I thought you, as well as I, would like to have this information, and, secondly, I wanted to emphasize by this means the very great importance of spinal puncture as a part of the physical examination. As Doctor Garrison pointed out, any child with the symptoms described in this case should have a spinal fluid examination. His comments have emphasized the important difference in prognosis, treatment and the like which is dependent upon whether the spinal fluid is purulent, cloudy or clear. Necropsy findings were about as clear cut and typical of meningitis as one could wish for and here again is an advantage in discussing this case. Sometimes I think we tend too much toward the exotic and rare, forgetting that we should emphasize the common and typical.

At necropsy there were few changes in the abdominal and thoracic viscera with three exceptions: (1) The lungs were moderately increased in weight, and there were patchy areas of slight induration and reddish-purple discoloration. As we project the slides on the screen, you will see that these areas represent bronchopneumonia. Children who die of an infectious disease which

has lasted two or three weeks frequently exhibit a secondary infection which is in the form of bronchopneumonia. (2) The liver weighed 570 gms. against an average normal of 331 gms. for the age of 16 months. It was therefore approximately one and one-half times enlarged. It appeared swollen and rather pale, presenting a parboiled appearance. This, of course, is the typical gross picture of so-called cloudy swelling or parenchymatous degeneration. The kidneys too were moderately enlarged and appeared swollen and somewhat paler than usual. (3) The thymus was much smaller than normal for a child of this age. Atrophy of the thymus occurs very rapidly in an infectious or debilitating illness such as this. These were the main changes except for the brain. The sulci were narrowed and the convolutions flattened, evidence of interstitial edema. At the base of the cerebellum and around the medulla, the pons and the cervical cord, there was abundant pale green purulent exudate which filled the cisterna magna and gave the impression that circulation of cerebrospinal fluid must have been impaired. This was borne out by the clinical observation of a block in circulation of the cerebrospinal fluid. Here, as in most deaths from meningitis, the gross pathologic findings were not spectacular.

What is the mechanism by which infection of the meninges, i.e. leptomeningitis, produces its marked signs and symptoms often leading to death. Certainly these effects cannot be explained by the mere presence of one or two cc's of purulent exudate which fill in the surface irregularities in the region of the brain stem, cerebellum and the optic chiasm. First, to consider *local effects*, there are three major factors which operate: (a) Although the pial membrane is usually adequate, as a mechanical barrier to limit the spread of infectious organisms and prevent their invasion of brain substance proper, it does not prevent diffusion of bacterial toxins. As a result of these toxins, there is a peripheral zone of one or two millimeters which may suffer marked degenerative changes. (b) A more diffuse effect of toxic injury is increased capillary permeability which leads to interstitial edema of brain substance. This, along with vascular engorgement, the accumulation of inflammatory exudate and perhaps some obstruction to the circulation of cerebrospinal fluid causes one of the most important local effects — increased intracranial pressure. As you know, this in itself may be lethal. (c)

The major blood vessels of the brain lie in the arachnoidal layer and it is this portion of the meninges (with the pia) which is involved in the usual form of meningitis. As a result of purulent inflammation, small arteries and veins may become thrombosed or markedly narrowed as a result of proliferative changes (endarteritis). When this occurs, profound effects result from a direct interference with blood supply. Such effects are more common in chronic infections such as may be caused by *H. influenzae* or *M. tuberculosis*. Second, there are *systemic effects from toxemia* which, (as in this case) lead to parenchymatous degeneration in many organs with resultant dysfunction of all parts of the organism. This can, in extreme cases lead to dehydration, acidosis, pre-renal uremia and cardiac failure. Third, there are *systemic effects from generalization of the primary infection (septicemia), secondary metastatic foci, or secondary (superimposed) infection*. Particularly in infants and small children, when focal infections terminate fatally, there is often a terminal septicemia. Septicemia is a potential hazard in any individual who harbors a focus of virulent microorganisms. In the case we have presented here, there is evidence to suggest that septicemia was a part of the

terminal picture. In addition to the bronchopneumonia previously described, there was a diffuse interstitial pneumonia. From the studies of Sydney Farber and others, it has been determined that acute interstitial pneumonia in an *infant* is almost pathognomonic of fulminating septicemia (usually streptococcal). The importance of secondary metastatic foci in the form of isolated abscesses is obvious. Secondary (superimposed) infection is common in serious infections of all ages. Bronchopneumonia is the most frequent secondary infection and was observed in this case. When the multiple local and systemic effects of meningitis are thus considered in detail reasons for the serious effects from this disease become clear.

Our final anatomic diagnosis was:

Meningitis, purulent (*H. influenzae*, type B)

Bronchopneumonia, bilateral

Interstitial pneumonitis, presumptive evidence of terminal septicemia

Parenchymatous degeneration of liver and kidneys

Fatty change of liver

Atrophy of thymus

Acute dilatation of right ventricle.

PUBLIC HEALTH DIRECTOR NAMED

Appointment of Dr. Maurice A. Roe as Regional Medical Director for the Public Health Service in Region 8 of the Federal Security Agency, with headquarters in Dallas, Texas, was announced today by Surgeon General Leonard A. Scheele. Region 8 includes Arkansas, Louisiana, New Mexico, Oklahoma and Texas. Dr. Roe succeeds Dr. Knox E. Miller who has been assigned to the City Health Department in Milwaukee, Wisconsin.

A specialist in malaria control, Dr. Roe has served with the Pan American Sanitary Bureau in Washington and Rio de Janeiro. From 1937 to 1941 he made laboratory and hospital studies of immunity in malaria at the Service's National Institutes of Health in Bethesda, Maryland. He has also done research at Rockefeller Institute and the Service's Plague Laboratory in San Francisco. On other assignments in Manila, Havana, Yarmouth, Nova Scotia and Ontario, Canada, he served with American Consulates in connection with foreign quarantine.

DO YOU KNOW?

That the average age of physicians in the United States is slightly less today than it was at the outbreak of World War II although in Oklahoma the median age is 50.9, with only two states (Mississippi and Arkansas) showing a median age above that?

Statistics are for all physicians in the United States, including interns, residents, and doctors not in active practice. The median age of the 199,745 doctors of the nation is 44.4 years. In 1940 the median age for 175,146 doctors was 45.8 years.

Oklahoma's position on the list indicates again the need for a larger number of medical school students. The research made by Frank G. Dickinson, Ph. D., Chicago, director of the Bureau of Medical Economic Research of the American Medical Association.

BRONCHIAL ASTHMA

"Aminophyllin has in recent years taken a definite place in the armamentarium of asthmatic medication. Physiologically it acts by relaxing the bronchial muscles. It is also extremely valuable in relieving patients of an adrenalin fastness and is less contraindicated in cases with cardiac disorders or hypertension."¹

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

1. Mountain, G. E.: Bronchial Asthma, J. Iowa M. Soc. 35:324 (Aug.) 1945.

President's Page

The House of Delegates at the A.M.A. session in St. Louis reached some important conclusions and created sweeping changes in the thinking at A.M.A. level. You will recall the sharp differences of opinion over the creation of a national Blue Cross and Blue Shield insurance company. Most of you know also that this issue was met squarely by the House of Delegates, and the national organization plan was rejected. In lieu of a national plan it was decided that the Blue Shield and Blue Cross should have a national enrolling agency with reciprocity between the state organization. In the minds of many of the delegates there was a feeling that different health conditions and different economic conditions in the several states made it advisable to retain state organizations for Blue Cross and Blue Shield insurance.

Another unprecedented development was the action which was passed to assess all members of the A.M.A. \$25.00 each. On the surface this may appear to be a radical procedure. Due to the serious threats to the American way of practicing medicine, I am sure all of you agree that radical action must be taken by the A.M.A. and their state and county organizations. In order to spread information efficiently it will be necessary that each of us respond to the assessment. I believe you will find that the plans, if financed properly, will be beneficial in stopping the serious threat abroad in the country.

In order to succeed in our objectives, there must be no division of opinion once the majority have voted. We must have confidence in and be united behind our State and National organizations.

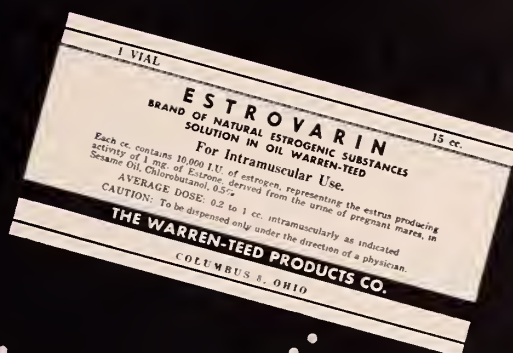
C. E. Northcutt

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GENERAL NEWS

A.M.A. SECRETARY EXPLAINS \$25 ASSESSMENT FOR 1948

Because of the widespread interest in the \$25 assessment which the A.M.A. House of Delegates took in St. Louis recently the following was prepared by George F. Lull, M.D., secretary and general manager of the A.M.A., for publication in the Journal to further explain why the action was taken:

Progress in American medicine is an achievement which we, as doctors, are proud to relate to the general public.

Yet, for some time now, many stories reaching lay readers have dealt with isolated cases of distress, indicting the medical profession, along with articles based on glib promises of social planners.

During the ensuing year, the medical profession must concentrate its efforts on one problem: to tell the American people about the many contributions which the medical profession has made to alleviate disease, preserve life and postpone death. Our story must stress the importance of our present system of voluntary care and present the true facts about medical care and health protection.

The House of Delegates of the American Medical Association, at the Interim Session in St. Louis, fully recognized these problems by creating a means for carrying on a nationwide health education program. To finance this program an assessment of \$25 was made on each member of the American Medical Association. Members of the American Medical Association do not pay dues. If they desire to become Fellows of the Scientific Assembly they make application and pay \$12 a year dues, which include a subscription to The Journal. This hardly pays for the paper and printing; notwithstanding the fact that the doctor receives the best medical periodical published anywhere in the world.

In 1947, the expenses of the Association exceeded income. For that reason dues of Fellows were raised from \$8 to \$12. However, even higher costs have kept apace with this raise and the Association may show a net loss for 1948.

The medical profession as a whole is of the firm opinion that government control of medicine would lower the standards of medical care in the United States, and is so sincere in this belief that it feels everything possible should be done to prevent such control from being thrust upon us.

A coordinating committee has been formed to help solve many of the problems which we face, and it is enlisting the support of every physician. This committee is composed of Dr. E. L. Henderson, chairman, Dr. Edward S. Hamilton, Dr. Gunnar Guundersen, Dr. Walter B. Martin, Dr. Louis H. Bauer, Dr. John W. Cline, Dr. William Bates, Dr. R. B. Robins, Dr. R. L. Sensenich, and Dr. George F. Lull.

GOLD MEDAL PRESENTED AT INTERIM SESSION

The second annual award of the Gold Medal to the outstanding general practitioner of the year was presented at the interim session in St. Louis to W. L. "Buck" Pressly, M.D., of Due West, South Carolina. Dr. Pressly has been practicing medicine in his home town for 32 years.

Dr. Pressly was named over 23 physicians nominated for the General Practitioner Award by state medical associations. All 23 were distinguished general practitioners, noted in their respective states for their long and devoted service.

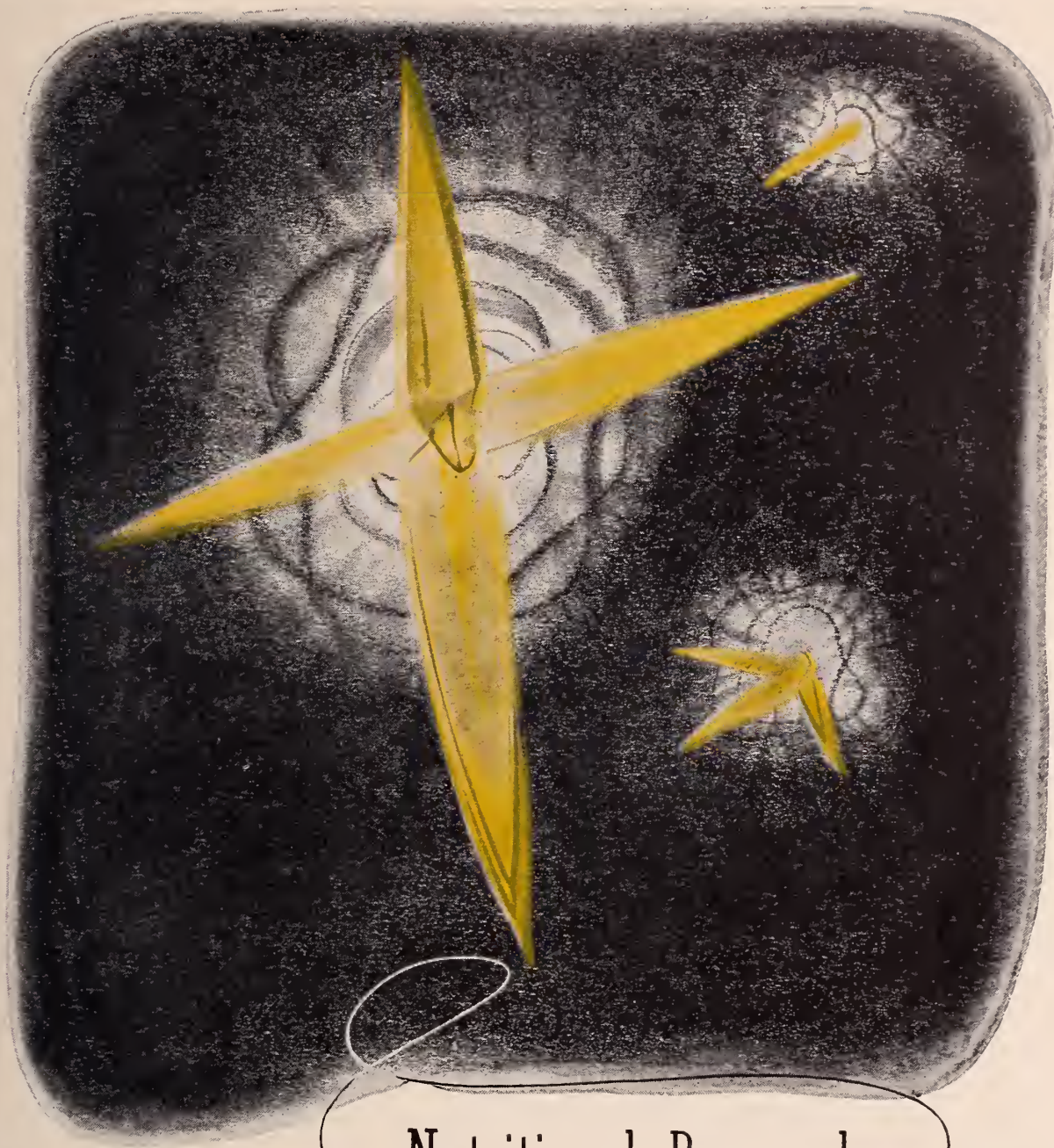
Dr. Pressly, who is considered an authority on rural health and sanitation in his state, has been called the "Father of Public Health" in the county where he practices. He got in the fight against typhoid the day he entered practice and has sponsored well-baby clinics and comparable measures for keeping his home town people well.

Newspapermen who interview him learned that Dr. Pressly had quite a career in baseball. In his early days, he turned down an offer from the Pittsburgh Pirates in order to enter medical school. He played first base for the Roanoke, Va., team from 1908 to 1912 and managed it for the last two years at \$5,000 a year. In 1913 and 1914, he moved over to the Norfolk team as playing manager, at the same salary. Both teams won pennants in their league while he managed them. But after the last pennant, he made up his mind to enter the medical profession.

In accepting the award later, Dr. Pressly said it was his dear friend, Dr. Hugh H. Trout, Roanoke, Va., who induced him to quit baseball and enter medical school. "It was my privilege to work with him for three years and it was his influence and advice that led me to the definite decision that I would give up the life of a professional ballplayer and devote my life to the practice of medicine," he said, adding: "In entering the medical field, I resolved and have sought rigidly to adhere to one idea—that my life would be one of service to mankind."

APPRECIATION AWARD GOES TO DEAN

Rev. Alphonse Schwitalla, S.J., Dean of the St. Louis University Medical School, received a certificate of appreciation and gold medal for his outstanding effort for the public welfare on a national level. The award was presented by E. J. McCormick, Toledo, O., a member of the A.M.A. Board of Trustees and president of the alumni association of St. Louis Medical School. The resolution on the award to the beloved priest read, "the delegates recognize the service to the public and to American medicine rendered by a distinguished and nationally known layman." Commenting on the award, Dr. McCormick said, "it is certainly a fine token of appreciation to a man who has worked untiringly for years in behalf of medicine for the benefit of mankind."



CRYSTALS OF
FOLIC ACID

Nutritional Research

During the past several years, Lederle has made a very substantial investment in time and money for the investigation of nutritional deficiency states. The vast majority of such investigations lead down dead-end streets, but occasionally—and most fortunately for mankind—a brilliant result is achieved. One of the fields in which these efforts have proven, and are proving, successful is the field of nutritional macrocytic anemias. The first step in the conquest of this field was the

perfection of a practicable intramuscular liver extract by Lederle several decades ago. More recently, the Lederle-Cyanamid research team isolated and synthesized folic acid, which has been proven specific for the macrocytic anemias of sprue, infancy and childhood, pregnancy, gastrointestinal dysfunction, and pellagra. We are close to a solution of many other similar nutritional problems. FOLVITE* Folic Acid *Lederle*, in various forms, is available for prescription use.

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PUBLIC RELATIONS CONFERENCE TO BE HELD ANNUALLY

Two-hundred and forty medical public relations leaders from all parts of the United States packed the sessions of the first National Public Relations Conference which was held during the Interim Session of the American Medical Association ending December 3.

The theme of the conference, which was sponsored by the A.M.A., was "Common Targets in Medical Public Relations."

Representatives from state medical associations in 43 states and Hawaii attended. They included presidents, executive secretaries, public relations directors, and chairmen of public relations committees. In addition, 22 county societies and 19 related national organizations were represented.

Dr. Claude Robinson, president of the Opinion Research Corporation of Princeton, New Jersey, in addressing the conference on "The Public Speaks on Health," stressed the fact that the public is "ends-conscious." He suggested to the doctors that, since the medical profession and the government backers of the Ewing report both agree on the objective of obtaining wide spread good health for the people of the U.S., the doctors should concentrate on a discussion of the "means," where the real difference of opinion lies.

Lester H. Perry, Executive Secretary of the Medical Society of the State of Pennsylvania, speaking on "Selling the Need for Public Relations to the Profession," said that doctors need to develop further an awareness of the immediacy of social problems — that is, problems dealing with their patients in relation to their community — in addition to their present awareness in the field of scientific advancement of medicine. *In other words, he said, they need understanding of the economics of medicine, such as the costs of medical service.*

C. H. Crownhardt, Secretary of the State Medical Society of Wisconsin, spoke on "Cooperating with Special Publics." He described the Wisconsin experience with labor and cooperative groups and revealed Wisconsin's desire to cooperate with special publics, including press and radio, in the solution of community problems relating to medicine and health.

The concluding speech of the afternoon was Clem Whitaker's presentation of his public relations firm's experiences in working with the California Medical Association in offering Californians a voluntary solution to their health care problems.

He told the conference, "Four Years ago, only about 2,500,000 California citizens were enrolled in voluntary health insurance plans. Today (as a result of California medicine's educational campaign) there are more than 100 voluntary health insurance systems operating in California, with over 5,000,000 insured members — a million more than Governor Warren promised to care for under his compulsory program."

Mr. Whitaker was besieged with questions following his talk, showing the intense interest of medical public relations people in furthering the extension of voluntary means of solving health problems.

At the dinner meeting Dr. Roscoe L. Sensenich, President of the A.M.A., spoke briefly on "The Profession Needs Public Relations." Dr. Sensenich said, "We welcome and enlist the support of all those who are fighting for the preservation of a free society as opposed to a state-controlled nation such as characterized the dictatorship of Europe. The attack upon medicine

is an attack on every phase of our business, economic, and social life that is now free."

"I think there is probably no business or profession that has less to atone for in failure to live right than does the medical profession, but I think there is probably no profession that has more to atone for in failure to tell the world of its doing than has the medical profession," Conger Reynolds, director of public relations for the Standard Oil Company of Indiana, said. "You have been so inhibited by your taboo on advertising as it applies to the individual that you have seriously neglected the telling of the story of the service of the medical profession to mankind. As a result, you have neglected particularly the telling of the story of freedom as a factor in the progress of the medical profession and as the keystone of its devotion to the patients' interest."

PUBLIC RELATIONS FIRM TO DIRECT A.M.A. CAMPAIGN

The American Medical Association has announced that Clem Whitaker and Leone Baxter, managers of a public relations firm which has its home offices in San Francisco, have been retained as public relations counsel to direct a broad program of public education.

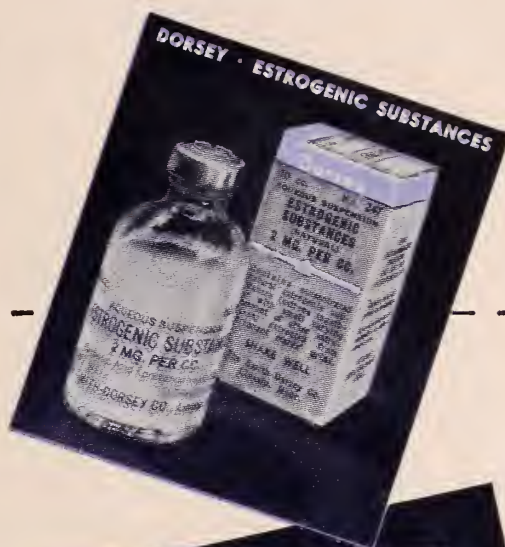
Mr. Whitaker and Miss Baxter directed the campaign of the California Medical Association which defeated the program of compulsory health insurance proposed in that state by Gov. Earl Warren. Four years ago, only about 2,500,000 California citizens were enrolled in voluntary health insurance plans. Today, as a result of the state association's continuing educational campaign, there are more than 100 voluntary health insurance systems operating in California, with more than 5,000,000 insured members — a million more than Governor Warren promised to care for under his compulsory program.

A 10-member planning committee approved employment of the San Francisco firm shortly after the House of Delegates, the policy-making body of the A.M.A., voted at the recent St. Louis meeting to assess each of the 140,000 A.M.A. members \$25 each for a nationwide plan of education on the progress and health program of American medicine. The A.M.A. campaign is to be built around the following three objectives:

1. To awaken the people to the danger of a politically controlled compulsory health insurance system.
2. To acquaint the people with the superior advantages of American medicine over the government-dominated medical systems of other countries.
3. To stimulate the growth of voluntary health insurance systems and prepaid medical care plans to take the economic shock out of illness and increase the availability of medical care to the American people.

NOTICE

Any doctor who may be solicited by any source to make contributions to the National Spanish Speaking Association of Physicians, Incorporated, 125 Riverside Drive, New York (Jacob Max Gershberg, Founder and President, and William B. P. McDonough, 1065 Lexington Avenue, New York, General Secretary) is urged to contact the Executive Office before making either contributions or commitments.



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FIRST ANNUAL MEETING SLATED FOR GENERAL PRACTITIONERS

The first annual meeting of the Oklahoma Chapter of the American Academy of General Practice is scheduled for March 18 and 19, 1949, at the Alldridge Hotel, Shawnee, Oklahoma.

All physicians who are members of the O.S.M.A. are invited to attend and it is not necessary to be a member of the Oklahoma Academy of General Practice, it was explained. No registration fee will be charged and reservations should be made directly to the Alldridge Hotel.

Among the outstanding guest speakers coming to the meeting are Ed. L. Compere, M.D. (orthopedist) Chicago; Max Thorek, M.D. (surgery) Chicago; and Paul A. Davis, M. D., President of the American Academy of General Practice, Akron, Ohio. Several outstanding speakers from the Oklahoma State Medical Association have also been invited to participate.

Registration will be held Friday morning with a business session slated the same day. A scientific program is also planned and round table luncheons will be held with a dinner meeting scheduled for Friday night. Although the Oklahoma Academy of General Practice does not have an organized Women's Auxiliary, wives of physicians attending are invited, it was said.

Officers of the Oklahoma group are Ned Burleson, M.D., Prague, president; D. G. Willard, M.D., Norman, vice-president; Allen Gibbs, M.D., Oklahoma City, secretary; and James Petty, M.D., Guthrie, president-elect. Malcolm Phelps, M.D., El Reno is program chairman.

REBATE RESOLUTION ADOPTED

The following resolution pertaining to rebates was adopted by the House of Delegates at the Interim Session on recommendation of the Reference Committee on Miscellaneous Business:

"Your committee has given prolonged consideration to this matter and approves that portion of the report which states that the House of Delegates reiterates condemnation of the practice of any member accepting rebates, and that the House of Delegates condemns also the practice of giving rebates by a member. It urges that the different state societies in those states in which such practices are not now illegal give serious consideration to the introduction of legislation making the practice of rebating to or by physicians illegal. Your Committee recommends further to the component county societies that on the receipt of a bona fide complaint the disciplinary committee of that society should hold a hearing and endeavor to make an investigation of the doctor's records and accounts at society expense, and that a record of such hearings and examination should be kept for the information of the state society and, if necessary, for the Judicial Council of the American Medical Association."

SPECIAL TRAINING COURSES AVAILABLE

Training courses ranging in length from 5 months to a year and given in specified civilian institutions during the fiscal year 1950 are now being offered to qualified Regular Army personnel, Major General Raymond W. Bliss, the Army Surgeon General announced recently. A development of the Medical Department's Career Guidance Plan, evolved some two years ago, this new program provides courses for officers of the Medical Corps, the Dental Corps, the Veterinary Corps, the Nurse Corps, the Medical Service Corps, and all three sections of the Women's Medical Specialist Corps.

TULSA RECEIVES FIFTY YEAR PIN

Born in Charles City, Iowa, W. Albert Cook, M.D., was graduated from the University of Illinois School of Medicine in 1897 and received his gold 50 year pin in recognition of 50 years in the practice of medicine Nov. 22, 1948.

C. E. Northcutt, M. D., President of the O.S.M.A., presented the pin at the regular meeting of the Tulsa County Medical Society. Dr. Cook has practiced medicine in Tulsa since the early 1900's.

He took his internship at Presbyterian Hospital, Chicago and received postgraduate training at the Chicago Postgraduate Medical School, Manhattan Ear, Nose and Throat Hospital, New York City, and the University of Vienna, Austria. He is former chief of staff of Hillcrest Memorial Hospital, Tulsa, and is on the staff of St. John's at Tulsa. In 1918 he was instructor at Fort Sam Houston at which time he was a captain in the medical corps.

A past president of the Oklahoma State Medical Association and the Tulsa County Medical Society, he was a delegate to the A.M.A. for 21 years.

Dr. Cook served as water commissioner of Tulsa in 1903 and is active in civic and fraternal organizations. He is a member of the Masonic Blue Lodge, Knights Templar, Shrine and others.

At the ceremony honoring Dr. Cook, P. P. Nesbitt, M.D., also of Tulsa, was presented a certificate in recognition of his services as a former president of the Oklahoma State Medical Association. Dr. Nesbitt was president in 1925.



P. P. Nesbitt, M.D., Tulsa, (right) is shown receiving a plaque in recognition of his services as president of the O.S.M.A. in 1925. W. Albert Cook, M.D., also of Tulsa, (center) was presented a 50 year pin. C. E. Northcutt, M.D., O.S.M.A. president made the presentations.

HEALTH SUPERINTENDENTS NAMED

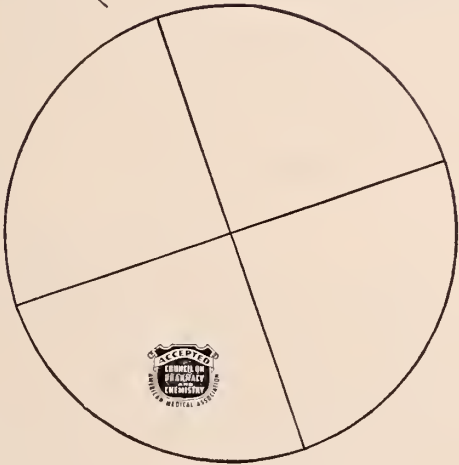
Recently appointed county superintendents of health are: C. M. Maupin, M.D., Waurika, Jefferson County; J. R. Karlick, M.D., Ardmore, Carter County; E. L. Buford, M.D., Guymon, Texas County; E. E. Goodrich, M.D., Chickasha, Grady County; E. F. Hurlbut, M.D., Keeker, Lincoln County; and Walter H. Miles, M.D., Oklahoma City, Oklahoma County. Appointments were announced by Grady F. Mathews, M.D., Commissioner of Health, Oklahoma State Department of Health.



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- Precipitated by *the menopause*
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MEDICAL ASSISTANTS SOCIETY—Shown above are officers of the Medical Assistants Society of Oklahoma. They are: (left to right) Alma Hall, president, Tulsa; Gladys Albright, first vice-president, Oklahoma City; Nina Speers, second vice-president, Oklahoma City; Geneva Staunton, recording secretary, Oklahoma City; Bennie McConnell, corresponding secretary, Tulsa; Oncita Chatfield, treasurer, Tulsa; and Gloria Oliva, parliamentarian, Oklahoma City.

MEET OUR CONTRIBUTORS

Harry Wilkins, M.D., Oklahoma City, wrote "Surgical Lesions Involving the Brzin in Infancy" in this Journal. Dr. Wilkins was graduated from the University of Oklahoma School of Medicine in 1947 and limits his practice to his specialty, neurological surgery. Dr. Wilkins has been certified by the American Board of Neurological Surgery and in the summer of 1948 was named a member of the Board of Neurological Surgery. He is also a member of the Harvey Cushing Society, a fellow of the American College of Surgeons, a member of the Society of Neurological Surgeons and the Central Neuropsychiatric Association.

P. E. Russo, M.D., A.B.R., Oklahoma City, is the author of "Afflictions of the Gastrointestinal Tract of the Infant" in the February issue. Dr. Russo, who limits his practice to radiology, was graduated from the St. Louis School of Medicine in 1930. He is president of the Oklahoma Radiological Society and is also a member of the Radiological Society of North America, American College of Radiology and Oklahoma Association of Pathologists. He has been certified by the American Board of Radiology and is chairman of the department of radiology, University Hospitals, Oklahoma City. Before coming to Oklahoma City, he was in general practice for 10 years in Cleveland, Ohio.

A. W. McAlester, III, M.D., Kansas City, Missouri, was one of the guest speakers at the annual meeting and presented the article "Indications for Ophthalmic Operations" that appears in this issue. He was graduated from the University of Pennsylvania in 1925 and limits his practice to ophthalmology. He has been certified by the American Board of Ophthalmology and is a member of the Association for Research in Ophthalmology and the American Academy of Ophthalmology and Otolaryngology. Dr. McAlester is a member of the council of the Jackson County, Missouri, Medical Society.

Felix R. Park, M.D., M.S., F.A.C.P., Tulsa, is the author of the scientific article on "Hypertension, Its Various Aspects and Treatment" in this Journal. Dr. Park was graduated from the University of Michigan receiving his A.B. in 1926 and his M.D. in 1930. He received his M.S. in internal medicine in 1937 from the University of Pennsylvania School of Medicine. Dr. Park limits his practice to internal medicine and cardiovascular diseases and was certified by the American Board of Internal Medicine in 1939 and was certified in cardiovascular diseases in 1944. He is a member of the National Board of Medical Examiners (1936), American Board of Internal Medicine, Fellow of the American College of Physicians, Fellow of the College of Physicians of Philadelphia, American Heart Association, Philadelphia Heart Association, Tulsa Heart Association, Philadelphia Pathological Society and Southern Medical Association. At the present time he is chairman of the Blood Bank Committee of the Tulsa County Medical Society. Dr. Park practiced in Philadelphia from 1937 to 1942 before entering military service where he served in the medical corps as a colonel until February, 1946.

Harold J. Binder, M.D., Oklahoma City, has a paper on "Therapy With Children" in the Journal. He was graduated from Tufts College Medical School in 1935 and limits his specialty to psychiatry. He has been certified by the American Board of Psychiatry and Neurology. He is a member of the American Psychiatric Association, American Orthopsychiatric Association and the Oklahoma Society of Neurologists and Psychiatrists. From 1941 to 1943 he was with the Child Guidance Clinic, Oklahoma City.

Construction work now is under way on 31 Veterans Administration hospitals in the United States.



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HAVE YOU HEARD?

William T. Gill, M.D., Ada, was recently elected president of the Valley View hospital staff.

W. H. Smith, M.D., a University of Oklahoma Medical School graduate, is now practicing in Lindsay, Oklahoma.

Earl Woodson, M.D., Poteau, was elected to the International College of Surgeons at the Recent meeting in St. Louis.

Dick Graham, O.S.M.A. executive secretary, recently spoke to the Business and Professional Women's club of Cushing and emphasized "socialized medicine does not mean free medical care."

Zola M. Cooper, M.D., *John Lamb, M.D.*, and *Arthur A. Hellbaum, M.D.*, of the University of Oklahoma School of Medicine faculty attended the annual convention of the American Academy of Dermatology and Syphilology.

David Fried, M.D., Blackwell, has recently purchased a new office building and will enlarge his office.

C. E. Cook, M.D., Cherokee, told the Rotary club of that city "it's the laymen, the average person of the public who seeks medical aid, who will get hurt most if congress adopts the proposed socialized medical service bill."

Donald Olson, M.D., and Mrs. Olson, Vinita, are parents of a boy born Thanksgiving day.

R. C. Meloy, M.D., Claremore, recently spoke to the Business and Professional Women's club of that city on the topic, "Your Health Is You."

Robert S. Srigley, M.D., Hollis, was the principal speaker at a Business and Professional Women's club meeting in Hollis.

Lemon Clark, M.D., Oklahoma City, was guest speaker at the family life class at Oklahoma College for Women, Chickasha, in December. He spoke on "Early Marital Adjustments."

James O. Asher, M.D., was elected chief of staff of the Ardmore sanitarium and hospital at the annual business meeting.

Carl W. Bowie, M.D., and Mrs. Bowie, Bristow, have chosen Carl Walton Bowie Jr. for the name of their son born December 15.

James F. Hohl, M.D., Norman, presented a paper at the Southwestern Section American Student Health Association in Dallas. Dr. Hohl's paper was entitled "The General Practitioner and Psycho-therapy" and was given as a part of a symposium on "Mental Health in College Students."

R. D. Williams, M.D. and Mrs. Williams, Idabel, were guests of Guy Lombardo on his "Meet the Boss" program in New York. Dr. and Mrs. Williams received an all-expense-paid vacation to New York for three days of entertainment and sightseeing before the program.

M. L. Henry, M.D., McAlester, was re-elected chief of staff of Albert Pike hospital recently.

J. William Finch, M.D., Hobart, stressed the necessity of hobbies for business men when he spoke to the Rotary club on "How to Keep Young."

P. A. MacKercher, M.D., was elected chief of staff of the Pouce City hospital.

McI Ansell, M.D., formerly of Mangum, has joined a Liberty, Texas clinic as diagnostician.

Morris Smith, M.D. and Mrs. Smith entertained the Guymon Smith and Buford Clinic staff at a turkey dinner just before Christmas.

C. M. Bloss, Jr., M.D., Holdenville, attended the organizational meeting of the Oklahoma Rheumatism society.

W. A. "Irish" Ryan, M.D., Thomas, was the recent recipient of a new car, a gift of friends and patients of the doctor.

St. Anthony Hospital in Oklahoma City recently observed its fiftieth anniversary. The Oklahoma City Chamber of Commerce helped celebrate the anniversary by having a special dinner with leading state, county and city officials, pioneer physicians and surgeons, leading Catholic and non-Catholic laymen and members of the clergy as guests. St. Anthony's is the state's oldest hospital.

Delma Danner is the new secretary to the Board of Medical Examiners. She will handle the correspondence and keep the records in the board's office.

CLASSIFIED ADS

FOR SALE. Or lease, 20 bed hospital in southwest Oklahoma county seat town. One other hospital, large territory. Write Key A, care of the Journal.

FOR SALE: Good Aloe and Co. E.E.N.T. steel chair. For information write Key H. care of the Journal.

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OBITUARIES

FRANK H. NORWOOD, M.D. 1872-1948

Frank H. Norwood, M.D., Lincoln county health officer, died December 2 in an Oklahoma City hospital. Dr. Norwood, who had practiced medicine in Lincoln and adjoining counties for over 50 years, made his home in Prague.

He is survived by his widow, two daughters, Marguerite and Jean both of the home address; one son, E. N. Norwood, Shawnee; and one sister, Mrs. W. C. Markham, St. Louis, Mo.

J. J. HIPES, M.D. 1879-1948

J. J. Hipes, M.D., Coalgate, died November 25 after being in ill health for more than a year.

Dr. Hipes was born in Bloomsdale, Mo. and was a graduate of Barnes Medical College at St. Louis. He came to Coalgate in 1910 and had practiced there since that time. Ill health forced him to close his office three months before his death.

He is survived by his widow of the home address, three daughters, two step-sons, one granddaughter, three brothers and one sister.

WALTER HENRY LIVERMORE, M.D. 1877-1948

Walter Henry Livermore, M.D., pioneer physician and surgeon, died December 25 at his home in Chickasha. He had been in ill health for 10 years.

Dr. Livermore was graduated from Rush Medical college and practiced in Polo, Joliet, and Aurora, Ill. before coming to Chickasha in 1910. He founded the Chickasha hospital and in addition to his activities in the medical world, he was a Royal Arch Mason, a member of the Woodmen of the World and the Benevolent Protective Order of Elks and the Lions Club.

Surviving are a son, George, of Lubbock, Texas; a daughter, Mrs. Howard Norton of Lubbock; and two sisters, Mrs. Cora Gorman of Chickasha and Mrs. Marjorie Smith of Morris, Ill.

J. I. DERR, M.D. 1873-1948

J. E. Derr, M.D., pioneer Waurika physician, died December 12 at his home.

Dr. Derr was born at Farmersville, Texas and attended the medical school of Tennessee University at Nashville. He began practicing at Chattanooga, Comanche County and moved to Waurika in 1905. He was in the medical corps of World War I and had been county health officer for some time. He was a member of the First Baptist Church of Waurika.

NORTHWESTERN FIRST WITH 1949 MEMBERS

Northwestern County Medical Society was the first society to send in 1949 dues for its members. Eighteen members were listed on the first membership list submitted for that county for 1949.

Counties included in the Northwestern Society are Dewey, Ellis, Beaver, Harper and Woodward.

Survivors include his widow, daughter and twin granddaughters and five sisters.

L. T. LANCASTER, M.D. 1879-1948

L. T. Lancaster, M.D., Cherokee, died December 8 following a prolonged illness.

Dr. Lancaster was born in Bridgeport, West Virginia and received his medical degree at Baltimore University School of Medicine in 1904. He came to Cherokee in 1903. He had been county health officer for more than 30 years and at the time of his death he was president of the Alfalfa County Medical Society. He was also active in the Baptist church, Rotary club, Lions, Blue Lodge, Knights Templar of the Masonic orders and the Chamber of Commerce.

He is survived by his widow, two daughters, two grandchildren, and one brother.

L. C. WHITE, M.D. 1872-1948

L. C. White, M.D., a resident of Adair since 1905, died suddenly December 4.

Dr. White was born at Bowling Green, Kentucky. He was a member of the Masonic Lodge, Odd Fellows, Modern Woodmen of America, and the Christian Church. He was president of the Mayes County Medical Society for approximately 20 years.

Surviving are his widow of the home address, a son, Carl Chandler White of Springfield, Mo.; three brothers, Milton, Roy and Herbert, all of Indianapolis, Ind.; and two sisters, Mrs. Mary Thomas of Bowling Green, Ky., and Mrs. Walter Petty of Denver, Colo.

HARRIS P. PRICE, M.D. 1887-1948

Harris Pierce Price, prominent Tulsa eye, ear, nose and throat specialist, died November 11 following a heart attack. He had been in failing health for several months.

Dr. Pierce was born in Pierce City, Mo. and received his medical degree from the University of Oklahoma in 1913. During World War I he served in the medical corps. He was active in Masonic and civic circles and was a member of the Kiwanis Club of Tulsa and Kappa Alpha fraternity.

Survivors include the widow, a daughter, two sisters and four brothers.

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*Snyder, M. L., Kiehn, C. L. and Christopherson, J. W.: Mil. Surgeon, 97: 380, 1945. • Shipley, E. R. and Dodd, M. C.: Surg., Gynec. & Obst., 83: 366, 1947 • Mays, J. L.: J. Med. Assoc. Georgia, 36: 263, 1947. • Curtis, L.: Surg. Clin. N. America, 1466 (Dec.) 1947.



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BOOK REVIEWS

PSYCHIATRY IN GENERAL PRACTICE. Melvin W. Thorner, M.D., D.Sc., Professor, University of Pennsylvania. W. B. Saunders Company, 1948. 659 pages.

A physician cannot practice successfully without the use of psychology. No physician ever has succeeded in his work without its use. In all of the specialties, as well as for the general practitioner, this rule holds good.

So many times the mind of a patient needs treatment in order to treat the body. A physician cannot help but fail unless he recognizes this principle.

This book shows some of the relation between mental ills and bodily ills. In some cases, it shows the best approach to make toward patients who are mentally ill. For the most part, however, this book deals with distinct mental problems. Its purpose is to acquaint interues and general practitioners with those aspects of the psychiatric theory which concern them daily in their profession. Chapter headings for the first two thirds of the book are as follows: 1. "Plan of the Book," 2. "Intelligent People," 3. "Dull People," 4. "People and Sex," 5. "People and Catastrophes: War, Disease, Social and Economic Failure," 6. "Unhappy People," 7. "Dementing People," 8. "Confused People," 9. "Dreamy People," 10. "Anxious People," 11. "Suspicious People," 12. "Queer and Twisted People," 13. "Older People," 14. "The Children," and 15. "The Rest of Us."

As the reader will notice as he goes through the 659 pages of this book, the author deals with all types of personality problems including those normal people with only slight quirks. His chapter heading mentions "The Rest of Us." The more serious mental deviations are discussed in the other chapters. In each chapter, the author makes a liberal use of illustrations and case histories, and any physician as he thumbs through the book will be surprised to feel himself in familiar surroundings. A large majority of the case histories might well have been taken from his own history file. Many of our mentals, sometimes called chronics by ourselves and our assistants, might stand a better chance of being restored to normal if the physician in general practice learned more of the psychiatric theory. By reading this book, a physician will not become a psychiatrist. I do feel, however, that the reading of this book will awaken in the physician the possibilities of treating their patients through the practice of psychiatry.

The last chapters of the book deal with the treatment from the point of view of the psychiatrist. A study of these chapters will show the physician the methods and approaches used by the psychiatrist. Other chapters at the end of the book go so far as to suggest treatments and management to be carried on by the physician in general practice. Detailed prescription of drugs and dosages for various mental ills are set out. Another chapter takes up shock treatment and related therapy.

If, for no other reason than to give a better background for practicing medicine, this book is recommended reading for any doctor.—George H. Niemann, M.D.

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FORBIDDEN
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and now all he can see
wherever he goes is food,
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MEDICAL SOCIETIES AROUND THE STATE

CARTER COUNTY

Showing of two medical films and election of officers featured the December meeting of the Carter County Medical Society. Roger Reid, M.D. will head the society for 1949. Vice-president is H. A. Higgins, M.D. and Royce B. Means, M.D. is secretary-treasurer. Delegates are F. W. Broadway, M. D. and C. A. Johnson, M.D. Joseph R. Karlick, M.D. and James O. Asher, M.D. were named alternates. Board of censors were J. L. Cox, M.D., J. Hoyle Carlock, M.D. and A. W. Trnman, M. D.

OTTAWA COUNTY

Rex M. Graham, M. D. was named president of the Ottawa County Medical Society at the December meeting. Other new officers are L. P. Hetherington, M.D., Vice-president; William Jackson Sayles, M.D., secretary-treasurer.

NORTHWESTERN COUNTIES

At the December meeting of the Northwestern Counties Medical Society R. G. Obermiller, M.D. was elected president. C. W. Tedrowe, M.D. was named secretary-treasurer and Edward McGrew will serve as vice-president.

ROGERS COUNTY

Roy J. Melander, M.D. is the new president of the Rogers County Medical Society elected at the December meeting. P. S. Anderson, M.D. was re-elected secretary and K. D. Jennings, M.D. was named vice-president.

CREEK COUNTY

Creek County Medical Society selected Frank Sisler, Jr., M.D. as the president of that society and J. F. Curry, M.D. was named vice-president at the election meeting. Carl W. Bowie, M.D. was elected secretary-treasurer.

COMANCHE COUNTY

Walter Wicker, M.D., was elected president of the Comanche County Medical Society at the meeting December 14. Other officers elected are O. L. Parsons, M.D., vice-president, Charles E. Green, M.D., secretary-treasurer, and Fred T. Fox, M. D., delegate.

PAYNE-PAWNEE

About forty members attended the meeting when Howard Puckett, M.D. was elected president of the Payne-Pawnee County Medical Society. Other newly elected officers are M. L. Saddoris, M. D., vice-president; O. M. Rippy, M.D., secretary-treasurer; C. M. Bassett, M. D., and Howard Puckett, M.D., delegates; and C. L. Mitchell, M.D. and A. B. Smith, M.D., alternates (Payne County) and J. H. Rollins, M.D., delegate; and M. L. Saddoris, M.D., alternate (Pawnee County).

JACKSON COUNTY

J. P. Irby, M.D. assumed his duties as president when the Jackson County Medical Society held its December meeting. Charles Tefertiller, M.D. was named secretary and Willar Holt, M.D. was elected president-elect. E. W. Mabry, M.D., retiring president, is the delegate for Jackson County and R. H. Fox was named alternate. Censors are E. J. Allgood, M.D. and Wayne Starkey, M.D.

KINGFISHER COUNTY

H. Violet Sturgeon, M.D., was re-elected president and Henry C. Trzaska, M.D., was re-elected secretary at a recent meeting of the Kingfisher County Medical Society held at Hennessey. At the meeting it was voted to present the request for amalgamation with the Garfield County Medical Society at the House of Delegates session in May.

J. H. Robinson, M.D. of the professional relations sub-committee presented the recommendations of the professional relations committee and they were discussed thoroughly and approved along with the recommendation that the medical school, in considering students for admission, give greater consideration to character and moral background and place somewhat less emphasis on scholastic standing. In addition to the county society members, John K. Hart, associate executive secretary, attended the meeting.

SEMINOLE COUNTY

George Baxter, M.D., professional relations sub-committee representative for that councilor district, presented the recommendations of the professional relations committee at the Seminole County Medical Society meeting held at Seminole recently. Action on the recommendations was delayed until they could be discussed more fully and the election of officers of that county society was also postponed until January at which time it was planned to have a dinner meeting with members of the auxiliary.

OKLAHOMA COUNTY

Onis G. Hazel, M.D. was installed as president of the Oklahoma County Medical Society at a special inaugural party Jan. 15 at the Oklahoma City Golf and Country Club.

STEPHENS COUNTY

Speaking on Skin Diseases, Onis Hazel, M.D., Oklahoma City, was the principal speaker at a recent meeting of the Stephens County Medical Society held at Duncan.

TULSA COUNTY

1949 officers for Tulsa County are John E. McDonald, M.D., president; W. A. Showman, M.D., vice-president; and John G. Matt, M.D., secretary-treasurer. Dr. Matt was re-elected secretary-treasurer and Ferd E. Woodson, M. D. is the new president-elect. Delegates are Charles G. Stuard, M.D., Walter Sfi Larrabee, M.D., Victor K. Allen, M.D., M. V. Stanley, M.D., H. A. Rnprecht, M.D., A. B. Carney, M.D., W. A. Showman, M.D., W. D. Hoover, M.D., John G. Matt, M.D., W. A. Dean, M.D. Alternates are Fred E. Woodson, M.D., Logan A. Spann, M.D., I. H. Nelson, M.D., A. Ray Wiley, M.D., R. Q. Atchley, M.D., Herbert S. Orr, M.D., J. D. Shipp, M. D., Donald V. Crane, M.D., H. B. Stewart, M. D., and Robert E. Funk, M. D. With the exception of the president, who was named president-elect last year, Tulsa county officers were elected at the annual business meeting December 13. A total of 45 members were eligible to hold office.

WASHINGTON-NOWATA

F. M. Adams, Jr., M.D., Nowata, was elected president of the Washington-Nowata Society at a recent meeting. Dr. Adams is also chief of staff of the new Nowata hospital.

ANNOUNCEMENTS

American College of Surgeons will hold a two day section meeting at the Hotel President, Kansas City, Mo., February 11 and 12. Conferences for hospital personnel and for the medical groups will run concurrently. A joint meeting of the two groups will open at 8:30 a.m. each day with the showing of medical motion pictures, followed by separate sessions at 10 a.m. Luncheons for the physicians and surgeons and for the hospital representatives, respectively, will be held daily. Separate afternoon sessions beginning at 2 o'clock will be held for the two groups. There will be a dinner meeting followed by a round table conference on the first evening.

American Board of Obstetrics and Gynecology part one examination and review of case histories will be held in various cities February 4 with the part two examination to be held May 8 to 14 inclusive, 1949, at the Hotel Shoreland, Chicago, Illinois. Application forms and Bulletins are sent upon request made to American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pa.

Oklahoma Academy of General Practice will hold its first annual session March 18 and 19 in Shawnee. Information can be obtained from O.S.M.A. executive office, 210 Plaza Court, Oklahoma City.

American Academy of General Practice first annual scientific assembly, Netherlands Plaza Hotel, Cincinnati, March 7, 8, 9.

Oklahoma State Medical Association annual meeting will be held in Tulsa May 15-19, Mayo Hotel.

Chicago Medical Society fiftieth annual clinical conference, Palmer House, March 1, 2, 3, 4.

Southwest Allergy Forum will be held in El Paso, Texas, April 4 and 5.

Association for the Study of Internal Secretions postgraduate course in endocrinology will be held in Oklahoma City February 21-26, Skirvin Hotel. Applications with the fee of \$100 should be made to Henry H. Turner, M.D., Chairman of the Postgraduate Committee, 1200 North Walker, Oklahoma City 3, Okla.

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OFFICERS OF COUNTY SOCIETIES, 1948

| COUNTY | PRESIDENT | SECRETARY | MEETING TIME |
|---------------------------------------|---|----------------------------------|---------------------------------|
| Alfalfa..... | G. G. Harris, Helena | C. E. Cook, Jr., Cherokee | Last Tues. each Second Month |
| Atoka-Bryan-Coal- Johnston..... | Charles D. Dale, Atoka | A. T. Baker, Durant | |
| Beckham..... | T. J. McGrath, Sayre | J. B. McGolrick, Erick | Second Tuesday |
| Blaine..... | Fred Perry, Okeene | Virginia Curtin, Watonga | Third Thursday |
| Caddo..... | Joseph Henke, Hydro | Edward T. Cook, Jr., Anadarko | Third Thursday |
| Canadian..... | J. N. Goldberger, El Reno | Jack W. Myers, El Reno | Subject to Call |
| Carter..... | Roger Reid, Ardmore | Royce Means, Ardmore | Second Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | R. K. McIntosh, Jr., Tahlequah | First Tuesday |
| Choctaw-McCurtain- Pushmataha..... | | Fred D. Switzer, Hugo | |
| Cleveland..... | Phil Haddock, Norman | James F. Hohl, Norman | Fourth Thursday |
| Comanche..... | Byron W. Aycock, Lawton | E. Stanley Berger, Lawton | Second Tuesday |
| Cotton..... | G. W. Baker, Walters | Mollie Seism, Walters | Third Friday |
| Craig..... | C. P. Chumley, Vinita | J. M. McMillan, Vinita | |
| Creek..... | P. K. Lewis, Sapulpa | Louis A. Martin, Sapulpa | Second Tuesday |
| Custer..... | J. G. Wood, Weatherford | Floyd Simon, Clinton | Third Thursday |
| Garfield..... | J. Wendell Mercer, Enid | Roscoe C. Baker, Enid | Fourth Thursday |
| Garvin..... | Carl Steen, Pauls Valley | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | |
| Greer..... | Fred Sellers, Mangum | J. B. Hollis, Mangum | |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | First Wednesday |
| Haskell..... | William S. Carson, Keota | N. K. William, McCurtain | |
| Hughes..... | L. A. S. Johnston, Holdenville | Paul Kernek, Holdenville | First Friday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Last Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Monday |
| Kay-Noble..... | Glenn Kreger, Tonkawa | E. C. Mohler, Ponca City | Second Thursday |
| Kingfisher..... | H. Violet Sturgeon, Hennessey | Henry C. Trzaska, Hennessey | |
| Kiowa..... | R. F. Shriner, Hobart | J. B. Tolbert, Mt. View | |
| LeFlore..... | John H. Harvey, Heavener | Rush L. Wright, Poteau | |
| Lincoln..... | Jack Mileham, Chandler | C. W. Robertson, Chandler | First Wednesday |
| Logan..... | E. W. Leheh, Guthrie | J. L. Leheh, Guthrie | Last Tuesday |
| Mayes..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | I. N. Kolb, Blanchard | W. C. McCurdy, Jr., Purcell | |
| McIntosh..... | J. Howard Baker, Jr., Eufaula | W. A. Tolleson, Eufaula | Third Thursday |
| Muskogee-Sequoyah- Wagoner..... | George L. Kaiser, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
| Northwestern..... | R. G. Obermiller, Woodward | C. W. Tedrowe, Woodward | 2nd Thurs. Even Mo. |
| Okfuskee..... | A. S. Melton, Okemah | M. L. Whitney, Okemah | |
| Oklahoma..... | W. W. Rucks, Jr., Oklahoma City | John F. Kuhn, Oklahoma City | Fourth Tuesday |
| Okmulgee..... | J. C. Matheney, Okmulgee | Mrs. Muriel Waller, Exec. Secty. | |
| Osage..... | C. S. Stotts, Pawhuska | S. B. Leslie, Jr., Okmulgee | Second Monday |
| Ottawa..... | F. L. Wormington, Miami | William A. Loy, Pawhuska | Third Thursday |
| Payne-Pawnee..... | Clifford M. Bassett, Cushing | W. Jackson Sayles, Miami | Second Thursday |
| Pittsburg..... | G. R. Booth, Wilburton | C. W. Moore, Stillwater | Third Friday |
| Pontotoc-Murray..... | W. T. Gill, Ada | Homer C. Wheeler, McAlester | First Wednesday |
| Pottawatomie..... | Jack W. Baxter, Shawnee | Ollie McBride, Ada | 1st and 3rd Wed. |
| Rogers..... | P. S. Anderson, Claremore | F. C. Gallaher, Shawnee | Third Wednesday |
| Seminole..... | Claude Chambers, Seminole | M. E. Gordon, Claremore | |
| Stephens..... | Fred Patterson, Duncan | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Texas..... | | W. R. Cheatwood, Duncan | Third Wednesday |
| Tillman..... | G. A. Tallant, Frederick | E. L. Buford, Guymon | |
| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | O. G. Bacon, Frederick | Second and Fourth Monday |
| Washington Nowata..... | L. B. Word, Bartlesville | John G. Matt, Tulsa | |
| Washita..... | A. H. Bungardt, Cordell | Mr. Jack Spears, Exec. Secty. | |
| Woods..... | R. A. Whiteneck, Waynoka | C. L. Johnson, Jr., Bartlesville | Second Wednesday |
| | | Aubrey E. Stowers, Sentinel | Last Tuesday |
| | | W. F. LaFon, Alva | Odd Months |

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne, Major—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

EVEN THE BUREAUCRATS HAVE A WAY

How did Mr. Ewing and Mr. Truman know just when the American Magazine would come from the press. Getting that Ewing hodge-podge under the wire just at the time Mr. Truman appeared before Congress to ask for everything, including socialized medicine, was good timing.

In spite of the administration's extravagance the Federal Security Bureaucrat has been penurious. Even though he was spending taxpayers' money he should not have worn himself down on that seven month's research in the realm of the nation's medical needs. Even the man in the street knows he could not learn all he has reported in the January American in seven months on an eight hour, five day a week schedule. Even though his finger is not on the pulse of bureaucracy, every man knows that a bureaucrat should not run the risk of working overtime. It's hard to understand. These red-tape-worms are usually ravenous for rest unless ambitious for power.

Please, Mr. Ewing, won't you tell the medical profession how you learned so much in seven months. Apparently you know more than the combined membership of the medical profession has learned in the past hundred years.

But, after giving credit for your erudition, one question troubles us. While we do not want to embarrass you, may we venture to inquire, how you succeeded in securing space in the American for such un-American stuff? Since we are trying to be good Americans we would like to know.

TEN YEARS' WARNING

For at least 10 years the Journal has harped on the fact that socialized medicine has consistently cost much more than anticipated by the countries embracing the system. The nation enthusiastically clamoring for socialized medicine is in just as much danger as the child reaching for the coiled rattle snake because it looked like his father's belt. Both carry venom.

The January 15, 1949, New Yorker under "London Letter" carries four long paragraphs on the National Health Service. In this discussion the pro's and con's are given unprejudiced consideration. To the writer of this editorial the facts presented and their implications are very discouraging. In support of the above references to cost we quote the following lines:

"The National Health Service has just celebrated its six-month birthday. The principal thing that has startled its patients, the British taxpayers, is its costliness, which has turned out to be far greater than the original budget anticipated. The expense of the first nine months of the scheme will come to at least forty-five million pounds more than was estimated, a figure that has been helped along by the eagerness of the public to have their eyes and teeth fixed "on the State."

The statement that "The English should soon be literally a far seeing people" might well have included the fact that they are being bitten by the dentists who seem determined to "cash in on the boon."

The following from the closing is an interesting comment upon the course adopted by our English cousins. Read this and suggest to our lawmakers that we wait and see how the scheme works out on English soil.

"As a going concern, the National Health Service cannot be judged, naturally, for years. Its merits as a hefty dose of pure Socialism are highly arguable. Some people consider that the Minister of Health, who is also responsible for housing, has put the cart before the horse and that the cart is being kicked to pieces. The magnificent new machine of universal medical care can only, after all, do its best to patch up the effects of the appalling over-crowding and medieval discomfort in which thousands of displaced Londoners are still existing."

THE ENGLISH HOUSEWIFE KNOWS

Again we report our English housewife's manifest distrust and disgust with the Na-

LIBRARY OF THE

tional Health Act. On January 2, 1949, she wrote:

"You ask for more news about the National Insurance. Well, the principle is that all workers pay a fixed contribution which is deducted from their wage each week by their employers. This then covers them and their dependents for all doctor's and hospital fees, optical and dental treatment and in addition, there are special maternity and death benefits. If you visit a doctor and he gives you a prescription, you take it to the chemist who dispenses it free and then he receives its value from the government. Like everything else the usual twisting has developed and people have been getting prescriptions for such ordinary things as cough medicine and discovered a chemist who will exchange the prescription for lipstick, face powder or come other such thing the customer wanted but didn't want to pay for. Then people have been getting spectacles and pawning them. Everyone has gone mad to benefit by the scheme, so much that it won't pay. With the result that they will enforce an increase in the weekly contribution (which I think is large enough already). I don't like the scheme because everyone, like dentists and doctors are so offhand, knowing they will get their fee from the State whether they are polite or otherwise."

If the English people who stood like the Rock of Gibraltar against invasion and destruction during the war can tolerate the corruption accompanying socialized medicine, how can we hope to be pure and strong when Ewing writes the prescription. Let's protect our honor. A loud remonstrance is in order.

UNCONTROLLED POWER

Too much governmental power channeling from the combined socialistic doctrines of Bismarck and Karl Marx through Lenin, Hitler and Stalin brought totalitarian ruin to European countries. The same political philosophy flowing through socialistic channels now animates the New Deal and threatens all the people with socialized medicine which has ever been the "big stick" dealing the last blow to individual liberty.

Paradoxically, the author of the New Deal, Franklin Delano Roosevelt, said, "The cornerstone of our whole democratic edifice was the principle that from the people and the people alone flows the authority of government," and that you cannot give more

power to the government without more "abridgement of freedom."

Everyone who loves his country and treasures the honor and integrity of its citizenry and the personal privilege of life, liberty and the pursuit of happiness, should remember that the bureaucrats already drunk with power are entrenched behind the breast-works the taxpayers have provided. They have occupied the citadel of democracy and are attempting to undermine the cornerstone with the additional power they seek through the false philosophy of better medical care for all the people.

It is easy to see that the liberty our founding fathers sought to establish and preserve is at stake and desperately in need of the people's support. The lawmakers in Washington live by the vote and they will listen to the voters who alone possess the authority of government.

To make this power effective it must be transmitted to the seat of government. The names of those through whom this power should find expression are listed below. Write them before it is too late.

United States Senators: Elmer Thomas, Medicine Park, Okla. and Robert S. Kerr, Oklahoma City, Okla. (Both Dem.)

Congressmen:

Dist. No. 1—Dixie Gilmer, Dem., Tulsa.

Dist. No. 2—W. G. Stigler, Dem., Stigler.

Dist. No. 3—Carl Albert, Dem., McAlester.

Dist. No. 4—Tom Steed, Dem., Shawnee.

Dist. No. 5—Mike Monroney, Dem., Oklahoma City.

Dist. No. 6—Toby Morris, Dem., Lawton.

Dist. No. 7—Victor Wickersham, Dem., Mangum.

Dist. No. 8—Geo. Howard Wilson, Dem., Enid.

MULE-ELEPHANT-MINK

With a good part of the taxpayers' taxable money and his own untaxable allowance, Mr. Truman should be able to get things done. Perhaps he can save enough out of his salary and expense allowance to make up the uncalculated cost of his socialized medicine program. We hope he can stand a pinch. The cost of compulsory health insurance will be worse than any drouth he and his Missouri mule ever weathered. But not having the mule is quite saving. (Sometimes the family's rise in the social scale makes it necessary to bring home the mink.)

The head of the house may be surprised to find that a mule skin won't do, even though he happens to be a Democrat. It's a safe bet that an elephant hide will not fill the bill, it's too pachyderm.

UNWARRANTED RADIO MEDICINE ONE EXAMPLE

One commentator speaking on the March of Dimes reminds his audience of all their childhood diseases over which they had no control, calls attention to the fact that through the March of Dimes they can protect their own children from danger, and they can be assured of control in case polio strikes. How wonderful to have such confident reassurance. If only they will dance and "dime" while they dine no harm can come. If we had time to listen we might be saved. March on, oh health minded radio commentators! When we get the dishes washed we will follow. If you can't get the job done we know Duz can. Why don't you take a rest while Doz does it. This would give us a sense of security while trying to catch up.

INCOMPREHENSIBLE

In certain fields of medical endeavor, some of the Federal Government agencies have had seventy-five years to prove the government's capacity to take care of the sick.

The outstanding examples of failure in the care of the sick can be found by looking carefully into the medical service provided for those groups dependent upon the government agencies for care.

Considering this embarrassing situation, it is amazing that the Administration has the nerve to ask all the good people to accept a service already proved to be notoriously poor for a period covering three quarters of a century.

ACCIDENTS

It is said that accidents are costing more than the Marshall plan. The cost in lives is mounting annually. The administration, so interested in health and the protection of life, might get interested in this problem which is much more in line with government functions that the control of medical care in connection with an alleged calamitous shortcoming on the part of the medical profession. Mr. Ewing has made a seven months study of the country's medi-

cal needs (what a long time for such a study). Apparently he has found the answer physicians with many years of study and experience are still seeking. His physiognomy, past performances and his published reports gave no evidence of such a capacity in the field of research. He might do better with accidents. They break right in the open and the cause is usually obvious. At least he would have something more tangible upon which to spend his obsessive energy and might provide a shorter cut to the goal of his political ambitions.

DESTRUCTIVE DEMOCRACY SEEKS THE DEATH OF MEDICINE

The continued ruthless damning of the channels of free enterprise by the present administration justifies the designation, destructive Democracy, which unobstructed will deal a death blow to American medicine.

Back of the capitol on a pediment of the House Wing there is a mute reminder which has been sorely neglected by the people who fix our policies and make our laws. It is doubtful if those who make speeches in Congress ever take a look at Paul Bartlett's exquisite sculptured representation of democracy protecting the arts of peace. We wonder how many of our representatives know about this symbolic representation of our democracy and appreciate its meaning. For half a century it has protested the inroads of bureaucracy.

Among the arts of peace what is more sacred than the patient-doctor relation. "Great God of hosts, be with us yet."

WHAT CHOICE AMERICANS

Since there seems to be no difference in the ultimate outcome whether a country goes communistic or socialistic why do we choose to walk on the edge of the socialistic chasm when we might easily remain in the middle of the road where we belong and where we cannot fall. Though we may expect attacks we will be more secure if we stay away from the brink of the precipice. The constitution and common sense should constrain us. As Americans we must stay in the middle of the road and keep America free.

Would it not be wise for the medical profession to cease talking about socialized medicine and fight for freedom. This would help defeat both Communism and Socialism and leave medicine undisturbed in its legitimate field as a free enterprise.

SCIENTIFIC ARTICLES

TEN YEARS PROGRESS IN OPHTHALMOLOGY*

C. G. STUARD, M.D.

TULSA, OKLAHOMA

Medical science has made great advances during the past decade. Many diseases and injuries which previously resulted in death or crippling deformities are now less formidable to the physician and surgeon due to improved methods of treatment. Ophthalmology has also kept astride with new and improved methods to preserve man's most precious possession, good vision. Many procedures and medicaments formerly used are now delegated to the past.

Trachoma which was an incurable disease in 1937, is now rarely seen due to the use of the sulfonamides. In 1938, in the *Journal of the American Medical Association*¹, a preliminary report was published upon the use of sulfanilamide in 150 cases of trachoma in Indians. This work and subsequent work stimulated a new approach to this disease. Oklahoma once ranked high in incidence of blindness due to trachoma since we have a large Indian population. Ten short years ago ophthalmologists dreaded to see a new case of acute trachoma due to its prolonged course and its resultant loss of vision.

The usual procedure for the aged patient with cataract 10 years ago was a prolonged waiting period of poor vision. This was felt to be necessary to enable the crystalline lens to mature or ripen. The operative procedure in use was that of extra-capsular extraction which in itself many times necessitated a second operation known as discission. Cataract patients may now be operated when vision is below that of the patient's requirements to carry on his or her duties. A farmer may choose to postpone his operation longer than a business man. Cataracts are now removed in the capsule which permits earlier removal and eliminates the secondary operation of needling.

The incidence of post operative complications have also been reduced by the intra-capsular method.

Many parents were told 10 years ago to wait and see if their child's eyes would straighten spontaneously. This is also done to-day but much less frequently. The general physician and the public are more alert to motor anomalies in children. The modern mother of a child with strabismus consults an ophthalmologist early. Many cases of strabismus are due to errors of refraction and a resultant faulty fusion faculty which can be corrected without surgery. These cases should be seen as early as two years of age. At this age proper corrective lenses can be prescribed. Cases of strabismus requiring surgery should be operated prior to school age to prevent permanent psychic damage. Nothing is more damaging to a young girl's personality than the presence of a crossed eye.

Retinal detachment was only a few years ago considered a hopeless catastrophe resulting in blindness. The typical story was a sudden loss of vision in one field followed by a total blindness. The improvement in results obtained from retinal detachment surgery can be attributed to the basic fact that a retinal tear is usually present. If this tear is accurately localized and the surgery is directed to the closure of this tear a higher percentage of good results can be attained. The larger eye clinics who 10 years ago reported 20 per cent results in retinal detachment cases are now reporting 50 to 60 per cent results. Greater results will be attained when pre-existing retinal diseases are solved.

The sulfonamides and antibiotics have revolutionized the treatment of many ophthalmic pathological states. Gonorrheal conjunctivitis 10 years ago resulted in blindness in a high percentage of cases. This

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disease rarely occurs to-day due to proper prophylaxis but if it does occur the proper use of sulfonamides with penicillin usually results in a cure without complicating loss of vision. Cases of interstitial keratitis formerly seen too frequently in the course of congenital syphilis have been reduced in number due to recent advances in pre-natal care of syphilitic mothers. The overall complications of syphilis as manifested in the eye are being reduced each year. The dreaded disease of serpiginous ulcer of the cornea due to the pneumococcus is now successfully prevented by more intelligent treatment of corneal foreign bodies and abrasions. The perforation of the ulcer with resulting loss of the eye is now prevented by the use of sulfonamides and the antibiotics. Many external infections of the eye have been controlled such as orbital cellulitis, retro-bulbar abscesses, infections of the tear apparatus and others.

The anticoagulants have been life saving drugs in the treatment of cavernous sinus thrombosis. The use of heparin usually requires the team work of an ophthalmologist and internist.

X-Ray and radium have been utilized in the treatment of certain eye conditions which were previously not responsive to known methods. The beta rays of radium emanation are now used in a variety of eye conditions; vernal conjunctivitis with its severe incapacitating symptoms of tearing, burning and stinging responds to the proper use of beta irradiation. Pterygium is a common eye disease in Oklahoma due to prevalent wind and dust. Many pterygii recur even after a properly performed operation. These cases are more difficult to control than the original pterygium. Vascularization of the cornea with resultant corneal opacities reduces vision if located in the pupillary space. The use of beta irradiation for recurrent post-operative pterygii has proven itself to be a sight saving procedure; sclerosing keratitis due to tuberculosis 10 years ago left the ophthalmologist helpless to prevent almost total loss of vision. The central corneal infiltrates were fed by new vessel formation which ultimately covered the entire cornea. These cases are being controlled with the use of beta irradiation to occlude the invading vessels. X-Ray was previously believed to cause cataract and retinitis except in small, protected doses. Many vascular conditions of the retina such as angimatosi-

retinae and retinitis proliferans show evidence of being arrested with posterior irradiation of the globe. The use of radium and X-Ray for the treatment of malignancies is well known. X-Ray has been found useful in the treatment of certain sulfonamide and penicillin resistant ulcers such as those caused by the pyocyanus bacillus. The dosage of X-Ray now used in therapy is much greater than used 10 years ago.

There has been a great deal of publicity in the lay press regarding the corneal transplant operation. Eye banks have been established in the larger cities to provide donor corneas for patients in need of this operation. It must be stated that corneal transplantation is not as commonly indicated as the lay press implies. This operation has advanced by the adoption of simpler methods and the wise selection of suitable cases. Many people believe that new eyes may be grafted from one patient to another. Corneal transplants are only successful in those cases of corneal opacities in which a normal posterior segment is present and in which healthy corneal circulation can be established. Corneas which are completely damaged by such chemicals as household lye will not yield to successful transplantation. A reasonably healthy corneo-scleral circulation must be a primary requisite for operation.

The use of contact lenses has also been widely publicized by over-enthusiastic optometrists and manufacturing opticians. Contact lenses 10 years ago were obtained from Germany and were made of glass. Fitting was by a trial and error method and the patient usually was able to wear these lenses for only a short period of time. Contact lenses were originally designed for patients with conical cornea. These patients cannot see with ordinary spectacle lenses. Contact lenses to-day are made of plastic and are fitted by means of molds taken of the patient's eyes. This method has greatly increased the wearing time and to-day contact lenses are worn by thousands. Professional people such as actresses, athletes and those appearing before the public wear them. Contact lenses do not replace ordinary spectacles but do answer a definite need. The big problem which has not been solved in contact lenses is the discovery of a non-irritating, optically inactive solution. More failures are due to the patient's intolerance to the solution rather than the lens itself. Many young women who have a high degree

of myopia wear contact lens for social occasions.

Glaucoma remains the outstanding cause of blindness which has not yielded to modern research. The methods of diagnosis and treatment of glaucoma have not been improved upon over those of 10 years ago. The incidence of glaucoma is increasing, especially those types occurring after the fourth decade of life. In many instances there are no warning symptoms of the disease to prompt a patient to seek aid. In many other instances these early warning symptoms are not recognized and the patient is given a new pair of glasses by an optometrist who is not trained to recognize early glaucoma. Smaller communities do not have the services of an ophthalmologist and must depend upon optometrists for glasses. In some small communities glasses are prescribed by a jeweler who uses a trial and error method. One of the greatest services the small town physician can render is to advise his patients who are complaining of visual difficulties to go to a qualified ophthalmologist. There are many types of glaucoma and each case is an individual problem. There is a prevalent belief among the people and some physicians that an operation for glaucoma is done as a last resort and that failure is sure if surgery is done. Cases of juvenile and congenital glaucoma are most discouraging but some vision can be retained if prompt treatment is instituted.

The general physician can also benefit himself and his patient if he routinely checks visual acuity in the course of general physical examinations. Pre-school visual examinations should be prescribed as a routine for all children. A normal examination should be gratifying to the parents and the physician. Many children enter school definitely handicapped because of poor visual efficiency. Many cases of psychiatric misfits and juvenile delinquents are traceable to poor vision in early school life. Many parents unfortunately believe their children should not wear glasses. These

people must be educated if we are to reduce the rolls of charity institutions. Many systemic diseases are manifested by certain eye findings which enables the ophthalmologist to advise his patients to seek general medical care. The present day emphasis on hypertension, arteriosclerosis and cardio-renal-vascular diseases necessitates the close cooperation between the general physician, the internist and the ophthalmologist. Surgery of the sympathetics aimed at alleviating the damage of hypertensive states is many times based on the findings as seen in the eye grounds. The classification of arteriosclerosis and vasospastic hypertensive states can only be accurately done by ophthalmoscopic findings. This is of extreme importance both as to therapy and prognosis. Diabetes, nephritis, blood dyscrasias and many neurological diseases are often first seen by the ophthalmologist. The importance of early recognition of these conditions is evident.

In conclusion it can be stated that as people live longer due to the increased efficiency of medical science it is an absolute necessity that vision be intelligently preserved. As the life span increases, the incidence of degenerative disease, arterio-vascular accidents and malignancies increase. These conditions are just as prevalent in the eye as in other organs of the body. Ophthalmology has made great advances in the past decade due to the close cooperation between the ophthalmologist and other specialties of medicine. Acute infectious diseases are being conquered in the eye as they are in other parts of the body. The conditions do not offer as great a challenge to medicine as do the degenerative processes which occur after age 50. To enable a man to live past 70 in blindness or helplessness due to poor vision would not be a credit to medicine. As we strive to help man live longer we should also strive to help him see.

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FOOD INFECTIONS AND INTOXICATIONS*

F. H. TOP, M.D., F.A.C.P., F.A.P.H.A.

DETROIT, MICHIGAN

Food poisoning is a general term which includes food infections and intoxications and which loosely interpreted refers to ill effects induced by ingestion of food or drink containing substances pathogenic to man. Thus, illness resulting from food containing chemicals, animal or plant derived poisons, bacteria and their products or parasites might be included in the category of food poisoning. In fact, the diversity of inciting agents with non-uniformity of signs and symptoms has led to variation in classification by different authors. Perhaps no classification can be entirely exact, for there are discrepancies which are difficult to reconcile. Food poisoning by rather common consent has come to include salmonellosis and the two toxin-induced entities staphylococcus food poisoning and botulism. Certain other conditions excluded from the generally recognized group are briefly discussed. These are chemical poisons, animal and plant poisons, "food-borne" infections and parasites.

Chemical poisoning may occur as the result of accidental or intentional placement of a poisonous chemical in food or drink. Sodium fluoride may be mistaken for baking powder, flour or soda in the domestic or commercial kitchen. Lead or arsenic has intentionally been placed in food to poison animals, occasionally to kill a human and, used as sprays for fruit, has caused illness in humans. Antimony and cadmium have been implicated in outbreaks due to food cooked in utensils the plating of which contained these chemicals. Poisoning due to chemicals is usually characterized by a short interval between ingestion and onset of symptoms; the time varies between 10 minutes and a few hours. Antimony and cadmium cause abdominal cramps, vomiting and diarrhea about a half hour after eating the poison-containing article of food whereas sodium fluoride, in addition, gives rise to paralysis of certain muscle groups.

Poisoning due to animals or plants must be considered in differentiation but today occurs rather infrequently in the United States. The following plants have been implicated: rye, affected by the fungus *Claviceps purpurea*, causing ergotism; poisonous types of mushrooms, rhubarb leaves, causing oxalate poisoning; snakeroot poisoning from drinking the milk of cows pastured where the plant is indigenous; and favism induced by eating the fava bean or contact with the blossoming plants. An example of animal poisoning is that caused by eating mussels at certain times of the year. Clinical manifestations vary in the group, for example, respiratory and other motor paralyses in mussel poisoning, severe abdominal pain, nausea, retching, watery diarrhea, and intense thirst in mushroom poisoning, while favism is characterized by severe anemia, hematuria, hemoglobinuria and jaundice.

Bacteria and their products are responsible for the majority of outbreaks of food poisoning and the foods involved are usually those in which the causative agent can grow or produce its toxin. This fact differentiates the typical food poisoning due to bacteria such as the *Salmonella* and those due to production of toxin by staphylococci and *Clostridium botulinum* from sporadic occurrences or epidemics of certain infectious diseases which may have some characteristics similar to food poisoning. Another characteristic feature of an outbreak of food poisoning is the explosive nature of the illness, though botulism is an exception to this. The characteristic explosiveness is a function of ingestion of hundreds of millions of organisms which multiplied in the affected food or of toxin preformed in the food prior to ingestion. In contrast, so-called "food-borne" infections are those which may be transmitted by food contaminated by organisms and which, in general, cause specific infections, such as typhoid and paratyphoid fevers, amebic and bacillary dysentery, trichinosis, undulant fever

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and some infections due to parasitic worms. Nearly all such infections occur after relatively longer incubation periods. Outbreaks are usually not explosive in character and secondary cases develop for weeks and months thereafter.

Various other conditions not related to food infections may be confused with them, particularly by the lay public. Frequently when gastrointestinal symptoms follow ingestion of food, a diagnosis of "ptomaine poisoning" is made by the uninformed. The term "ptomaine" is a misnomer for there are no substances which can be so called. According to Dack¹ the term "ptomaine" was introduced in 1870 by Selmi and the word is derived from a root which means "corpse." The idea of putrefaction is probably incorporated in this word and with it the popular belief that spoilage of food-stuffs was a cause of food poisoning. If organisms or their toxins, pathogenic to man, are incorporated in an ingested food, then food poisoning may result but in many instances the process of putrefaction adds to the flavor of a food, as for example Limburger cheese. Vague syndromes predominantly gastrointestinal in character and called "intestinal flu" are often erroneously thought to be due to food poisoning by affected individuals.

FOOD INFECTION: SALMONELLOSIS

Food infection is an acute condition which occurs following ingestion of food containing bacteria (members of the *Salmonella* group) and is characterized in decreasing order of frequency by abdominal cramps, nausea, vomiting, diarrhea and fever. It is usually explosive in character and is thus distinguished from other infections with similar symptoms such as amebic and bacillary dysentery, trichinosis and acute gastrointestinal attacks of unknown origin. Other bacteria such as the alpha type streptococci, *B. coli*, *Proteus vulgaris* and members of the *Aerogenes* group have been implicated, but Dack¹ states they have not been conclusively incriminated. Salmonellosis is caused by a large group of organisms of which the commonest offenders in the United States are *S. typhimurium* (ætrycke), *S. enteritidis* and *S. cholæræus* (supestifer). Numerous other members have been involved and can be identified by the agglutinin absorption test^{2,3}. The organisms readily grow in favorable media and in foods which are bland and moist. They are easily destroyed by boiling or by pasteurization temperatures.

The prevalence of the disease varies considerably, outbreaks are most commonly detected after banquets or other group meals⁴, while sporadic cases are infrequently recognized and probably many instances of ordinary diarrhea may in fact be salmonellosis. The source of infection is multiple, man serving as a reservoir as patient or convalescent carrier while infected rodents act as such, frequently releasing organisms through their droppings. Ducks, turkeys, other domestic fowl and domestic animals have been found to harbor organisms. Transmission occurs through contamination of food by droppings of rodents, soiled hands of foodhandlers and consumption of infected foods. Age, sex and color play no important role in the occurrence of the disease, for susceptibility is general and there is no evidence of lasting immunity. Although the amount of food eaten bears some relationship to apparent infection, the severity of the clinical course is not necessarily proportional to the amount of infected material eaten.

Pathological changes are most notable in the stomach and small intestine in mild cases while in severe attacks resulting occasionally in death ulcerations are found in the small and large intestine.

The incubation period of salmonellosis has a range of six to 48 hours with the shorter period for very susceptible individuals and longer periods for the less susceptible with mild infections. The onset is abrupt with abdominal cramps, nausea, vomiting, and diarrhea; fever may not be present. Diarrhea persists for several days with stools containing bulky offensive material early and later becoming watery. Organisms can frequently be cultured from stool specimens. Persistent vomiting and diarrhea depletes body fluids, which may result in a temperature rise. Prostration and death may occur in 24 to 36 hours. Central nervous system phenomena are occasionally noted and convulsions are not uncommon in children. Critically ill adults may exhibit signs of shock. The prognosis is generally favorable and recovery takes place in a short time, usually within one to three days. A severe attack leaves the patient in a weakened state and full recovery is a matter of a week to 10 days.

The diagnosis may be difficult in the sporadic case but in outbreaks the organism is frequently found in offending articles of food, in vomitus or feces. In staphylococ-

cus food poisoning the incubation period is much shorter, the onset more abrupt, the symptoms in general more severe and recovery more rapid. In botulism, gastrointestinal symptoms are not striking and central nervous system phenomena are prominent.

Treatment is directed at replacement of fluids and salt. Water may be given by mouth, if tolerated, but salt replacement usually demands intravenous therapy including a 10 per cent solution of glucose. If the condition is discovered early an emetic and a brisk cathartic may be useful, but these should not be used if vomiting and diarrhea have been present for several hours. Morphine should not be used to decrease the intestinal motility or tenesmus until the bowel is empty of waste products. After vomiting ceases, Kaolin or a bismuth preparation may be given by mouth to promote absorption of bacteria and their products. Heat applied to the abdomen relieves the cramp-like pain. Sulfonamides and antibiotics have been disappointing. During recovery the diet should be fluid, for the gastrointestinal tract will not tolerate a full meal. Semisolids may be resumed after successful retention of milk, custards, eggs or soups for a period of several days.

Prevention of salmonellosis consists in providing pure, well preserved and cooked foodstuffs. Leftovers should be properly refrigerated and consumed or destroyed within a few days of preparation; before use, the leftovers should be inspected for foul odor or change in color. Rodents should be eliminated from foodhandling establishments; foodhandlers should be instructed in cleanliness and the proper preparation, care and refrigeration of foods and prevented from working while suffering from diarrhea.

Cases should be reported to the health department and the source of infection investigated and determined, if possible, by obtaining a sample of the offending food. The patient should be isolated and his discharges disinfected. Contacts and the premises need not be quarantined.

FOOD POISONING OR INTOXICATION: STAPHYLOCOCCUS

Staphylococcus food poisoning occurs as the result of ingestion of preformed staphylococcus toxin (enterotoxin) which causes an abrupt and sometimes violent gastrointestinal upset accompanied by nausea, vomiting, prostration and occasionally severe

diarrhea. The condition is caused by staphylococci, certain strains of which produce a potent toxin which causes the enumerated symptoms. Staphylococci are ubiquitous in man and are found on the normal skin and mucous membrane and pathologically on skin as the etiological agent of some pimples, boils, furuncles and impetigo.

The distribution of staphylococcus food poisoning is worldwide and it is probably the commonest form, but not being reportable, its prevalence is not known. Furthermore, the condition is often so mild that many individuals do not seek the aid of a physician. Many kinds of food have been involved, among them milk products, baked goods, meats and fish^{5 6 7}. The commonest vehicle is custard and cream-filled pastry; also involved is milk from cows with mastitis, and milk contaminated by human carriers has been implicated. It is difficult to incriminate a person merely because nose and throat cultures are positive; the organisms from both suspected carrier and from contaminated food must be enterotoxin producers and strain identification procedures are not simple and always conclusive.

Staphylococcus food poisoning is not communicable, and nearly all persons are susceptible, so that age, sex and color are unimportant factors in the occurrence of the disease. Transmission is by ingestion of food which harbors the enterotoxin. Outbreaks occur more commonly in the warm summer months, but cases have been noted at any time of the year.

The onset is abrupt and symptoms occur from half an hour to six hours after eating the toxin-containing food with two to four hours as the average period of incubation. Salivation is followed by severe nausea, vomiting or mild cramping may be found in mild cases but in the severe retching occurs and blood may be present in vomitus or stools. Symptoms are of short duration lasting three to six hours, after which recovery is complete.

The clinical diagnosis is made possible by observing that symptoms appear soon after food is taken, an effect on most of the group who partook of the food and the severity and brevity of symptoms. Additional evidence is furnished by isolation of staphylococci from suspected food and the demonstration of enterotoxin-producing ability of the organism by injection of filtrates into kittens, monkeys or human volunteers. Re-

cently bacteriophage typing has aided in tracing possible sources⁸. Treatment is supportive, for no drug or serum is effective. Emetics and purgatives are unnecessary because the severe bouts of vomiting and diarrhea eliminate the toxin. Replacement of fluids and salt are necessary, for dehydration may lead to shock or alkalosis. Because of the short duration of the nausea or vomiting, food can be given by mouth quite soon after an attack. Fluids are preferable at first and solids may be used within 24 hours, if tolerated.

Prevention consists in care in preparation of food, exclusion from foodhandling if suffering from pyogenic infections, especially of the hands; and the exclusion of persons with colds and paranasal sinus infections. There should be proper refrigeration of foods, particularly those known to serve as good media for staphylococci.

Cases should be reported so that the source of toxin may be found and its cause eliminated. Contacts and premises need not be quarantined.

FOOD POISONING OR INTOXICATION: BOTULISM

Botulism is a particular type of food poisoning resulting from the ingestion of food containing the toxin of *Clostridium botulinum* or parobotulinum and characterized by central nervous system involvement particularly affecting the motor innervation of the ocular and pharyngeal muscles. There are five types of the organism, namely A, B, C, D, and E. Human botulism has been reported as due to Types A, B and C. The organisms are free-living, spore-forming, and grow in the absence of oxygen in decaying animal or vegetable matter or in improperly sterilized foodstuffs, of which the chief offenders have been olives, asparagus, navy and string beans and meat.

According to Meyer⁹ and his associates, the organisms are rather prevalent in nature. Botulism has been reported from many countries¹⁰ as the result of toxin production in foods preserved in a number of ways. Commercial canned foods are now relatively safe, but home-canned fruits, vegetables and meats have been affected. The source of toxin is improperly cooked and processed food in which botulinum toxin has been produced, and the condition results from eating food which contains the toxin. Age, sex, color, season or economic status appears to play no part in the incidence of botulism.

The disease is highly fatal in the United States and pathological findings are limited

largely to the central nervous system and the endings of the parasympathetic nervous system. Changes are noted on microscopic inspection, and these include congestion, edema, petechial hemorrhages and occasionally thrombosis.

Symptoms usually occur within 18 to 24 hours of eating food containing preformed toxin, a period much longer than noted for staphylococcus food poisoning, and the onset is also somewhat less abrupt. The first presenting symptoms and signs are dizziness, weakness, visual disturbances and drooping of the eyelids. Gastrointestinal symptoms are not generally marked but there is obstinate constipation. The cranial nerves are affected and those most frequently involved cause pharyngeal and palatal paralysis, respiratory difficulty and loss of voice. In severely affected patients prostration is severe with effort difficult, exhausting or impossible. Sensory disturbance is not marked, and the patient is rational. There is little change in body temperature but the pulse is rapid. Pneumonia may result from aspiration of mucus due to difficulty in swallowing. Death is likely the result of respiratory paralysis or pneumonia. The diagnosis of botulism is more often confused with other central nervous conditions than with food infections or intoxications. Conditions causing the most difficulty are encephalitis, poliomyelitis and the serous or nonsuppurative meningitides. In none of these diseases does the patient appear so lucid mentally and yet show marked prostration. In addition, history, occurrence of similar cases, delayed symptoms after ingestion and a negative spinal fluid assist in the diagnosis. Laboratory evidence as furnished by sudden death of mice or guinea pigs fed with the suspected food and recovery of toxin aid in confirmation.

If seen within 24 hours of the onset of paralysis or before it has occurred, serum may be administered with some expectation of benefit. Following a test for serum sensitivity, 10,000 to 50,000 units of polyvalent botulinus antitoxin should be given intramuscularly with the larger dose suggested for adults and those severely ill. The patient should be given glucose in saline or water and where pharyngeal paralysis is present fluids should be given by vein and interstitially. Washing out the stomach is of value only if the condition is recognized early. Nursing care should be limited to essentials because of the profound weakness,

and absolute rest is imperative. During the first few days the patient should not be allowed to move, and bathing and unnecessary moving of the patient by attendants must not be permitted.

Prevention consists in governmental control through inspection and regulation of commercial processing of canned and preserved foods. Housewives should be educated in the essentials of safe processing of home canned food. Food from swelled cans should be destroyed, and any question of spoilage should lead to discarding the food.

Botulism is reportable but does not demand isolation or quarantine precautions.

SUMMARY

A varied number of conditions may be called food poisoning, but rather wide acceptance has limited the term to salmonellosis, staphylococcus food poisoning and botulism. The enumerated diseases are discussed, and

variations in their behavior are outlined along with suggestions relating to treatment and prevention.

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PROBLEMS IN NUTRITION

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With a significant decrease in the arable land area of the world, in the presence of a rapidly increasing population — two and a quarter billion today, three billion 25 years hence — it is understandable that all thinking people must feel a growing concern over the ultimate outcome. Food becomes more and more important. Bodily vigor and mental acumen can no longer be taken for granted.

This paper will cover a very few of the problems apparent to the discerning physician in our section of the U. S. A. But even with these limitations it may appear to those who have given serious, recent thought to nutrition that we are proposing an optimum diet before such a diet has been devised; specific treatment for nutritional deficiencies before such can be diagnosed; and to do all this under the joint handicaps of, on the one hand, inadequately educated, insecure people, and, on the other, foods grown on depleted soils or robbed of their vitamins and minerals by man, or, which may be much worse, glamorized with harmful non-food substances to increase their salability.

With the exception of mother's milk for the infant, we do not have an optimal diet; we still are unable to diagnose many nutritional deficiencies; our housewives are woefully uneducated in the fundamentals of biology and many are quite unable financially to afford necessary food; nor can we prescribe even such staples as bread, meat, and milk with complete assurance. Yet all these problems must be faced, and faced by the practicing physician. It is a definite responsibility he cannot evade. No nation can be stronger than its citizens and no citizen can be stronger than the food he eats. Nor does any one group possess as much practical understanding of the basic needs of the individual born, or to be born, as the medical profession.

We already know enough to make a good start in the matter of food and we do have the requirements of the *optimal* diet as set forth so clearly by Carlson. The requirements can be kept in mind whenever prescribing *any* diet and a constant effort be made toward meeting them in the light of the increasing knowledge of the science of nutrition as this unfolds. An optimum diet,

in Carlson's view, "should consist of the kind and quantity of foods as provide optimum resistance to disease; optimum conservation of the factors of safety and the powers of repair; optimum length of life and optimum efficiency within the framework of the individual's potentialities. And all this in the light of the sequelae of such accidents and diseases as the patient may have had."

DIAGNOSIS

More attention will be given to diets later on. Right now let us consider the diagnosis. So thoroughly have we been drilled in the necessity of making a diagnosis — one duly recognized and set forth in our text books — that no satisfactory method has yet been devised to approach the correction of nutritional deficiencies until these shall have become clearly recognized as diseases. Once a symptom-complex has been recognized as a deficiency disease a therapeutic diet is almost automatically set up. Too often it is forgotten until the patient presents himself to another physician with a new, but none-the-less severe, set of other deficiencies.

What do we mean by a nutritional *deficiency* and how detect it? Here all is confusion. There once was a time when nutritional deficiencies meant deficiency diseases. And deficiency diseases meant clear-cut entities like xerophthalmia when Vitamin A was lacking; or beriberi when B was lacking. It was all very simple. Nutritional deficiencies meant deficiency diseases and deficiency diseases meant deficiencies of one or another of the vitamins. To be sure goiter appeared in those countries deficient in iodine but goiter had a whole space to itself in the medical literature. It was not included with the deficiency diseases. Further to complicate matters, investigation revealed Vitamin B to contain not one but two factors, then three, then four, and so on until the chemists have identified and synthesized close to a dozen. World War I came along, and, as an aftermath, starvation and near-starvation for vast hordes of children in the ravaged countries. Many swelled and became near-translucent. They lacked proteins. Protein deficiency, previously known, then became widely recognized and added to the deficiency disease list.

As a whole, however, the classification of the various nutritional deficiency states is yet to be worked out and officially adopt-

ed. Meanwhile, the classification proposed by Miranda in a recent article in the Journal is worthy of serious consideration. Likewise we are indebted to him for initiating a new concept in diagnostic procedure — the concept of statistics — in arriving at an individual diagnosis. He does this, dramatically, in the case of dry hypoproteinosi.

Miranda classifies the nutritional deficiencies into (a) those lacking calories; (b) those lacking vitamins, one or more; and (c) those lacking protein. He does not include those lacking minerals. To the first he gives the term undernutrition; the second, malnutrition; and the third, hypoproteinosi. The latter he divides into the wet and the dry types. The wet we have already considered. The dry, diagnosed statistically, is infinitely more prevalent. Miranda recognizes dry hypoproteinosi in entire populations by a high general mortality rate; high infant mortality rate; high mortality rate from the infectious diseases of childhood; high incidence of the gastro-intestinal diseases; high natality (birth-rate) index; and low figures of height and weight of the population. So far so good but what of those disease states induced by lack of minerals. We have in mind the correlation of types of soil in Oklahoma with the percent of men physically disqualified by selective service. Or those of Cheshire, England. Are these differences in physical health due to mineral deficiencies or to some other factor or factors? If to a deficiency of minerals should they not be classified as nutritional deficiency diseases?

Faced with, potentially, hordes of inadequately fed patients what can the practicing physician do to correct the situation, using the facilities he now has?

He can start now, today, searching for the signs and symptoms of inadequate nutrition in every patient that comes to his office. He can also begin a one-man, training-on-the-job program of learning to detect these deficiencies, using the senses he now has. He will soon be amazed to see that what he, heretofore, has been labeling signs of old age, are nothing more or less than signs of inadequate nutrition.

What the clinician most needs today is to develop a nutrition conscience, a method of approach and a technique. I give you mine for what they are worth. Each clinician must work out his own salvation. My own

interest in positive health was aroused when I learned that well babies could be kept well; that mothers, after all, loved their babies and wanted them to live and be well; that mothers could be taught; that I, too, could learn. Gradually, while I was working in Public Health there grew up the concept of health — optimal health. This, I would think, has best been crystallized in the poster revealing a healthy child as published by the Bureau of Home Economics. Why not keep this poster in mind in thinking of the well adult as well as the well child? A healthy child, this poster describes, as one having a happy, alert expression; sound, even teeth; deep, broad chest; strong, straight legs. What is there, other than inadequate nutrition, directly or indirectly, and trauma, that could change a child like this into the sort of adult who comes to us for help?

The clinician already has two very important diagnostic methods at his disposal — both of them as old as medicine itself — namely, history (Miranda's statistical method applied to the individual) and the physical examination. Not merely the ordinary physical examination by systems, but in addition thereto a very careful painstaking survey of skin, hair, nails, mucous membrane, stance, gait, expression, joint function, posture, etc. The concept of health, not disease, must be kept uppermost. Basic in the history is the food habits history. Try using the food habits survey to determine what the patient does eat and why he eats it. Try comparing your patient, any patient, with the concept of what that patient could have looked like had he been kept well-fed.

In our experience we find it invaluable to have the intimate, personal history of the food habits' of the patient before us before we set up for him the provisional diet we believe he needs to correct the inadequacies our study has revealed. This provisional diet is set up to cover, in so far as possible, the essential nutrients, proteins, fats, carbohydrates, mineral salts, vitamins, roughage, and water recommended for his age and status by the National Council of Foods. Occasionally all that is needed is a limitation of calories or an addition thereto. Much more often carbohydrates must be cut and proteins added. Very often the standard male diet of muscle meat, (or, what is worse, embalmed meat), white bread, and white potatoes must be augmented with supplementary minerals and vitamins,

either in other foods or as drugs; or the female diet of coffee for breakfast, fruit juice for lunch and left-overs for supper fortified with something more substantial, again resorting to the nutritional essentials in the drug form, if necessary, to get the patient physiologically and psychologically ready for a saner way of life.

The menu-calorie diet sheet: To save time we have gathered pertinent information from one source and another onto a single sheet to enable us quickly to fashion an individual, personal diet for each patient. To get the best results this gives the patient considerable choice of kinds of food in each category. The patient is asked to do some homework by keeping an itemized record of the food he actually does eat and bring this with him on his next visit. This list is analyzed, audibly, in terms of the essential nutrients contained, thereby allowing the patient to learn by the fascinating method of eavesdropping. Sometimes one session is sufficient. With other patients the re-education in eating habits must go on week by week or month by month before the patient is converted to a saner view. Eventually one usually wins with all but the actual psychotic.

We now come to the last, and most baffling, of all the problems we have time to consider. That is, how to avoid recommending processed foods which contain adulterants, contaminants, or actual poisonous non-food substances. This, and its opposite, how to be sure the foods we do prescribe contain all the essential elements, necessary not only for the optimum health of the individual but the survival of the species, leads us to the final paragraph.

WHAT ARE OUR FUTURE GOALS?

These are many and varied — large, small, easy, difficult. Some purely professional, some to be carried out as the normal, natural responsibilities of any citizen. In the long run they include research in any of many kinds. Education and legislation must be considered. Soils must be rebuilt, conserved, intelligently used. Population shifts are bound to come. Urban to rural, rural to urban. Dissatisfied, inadequately fed animals, human or lower, search restlessly for food so long as strength permits. The wisdom of the physician is needed more today than the words of the advertiser. There is work to be done, of a kind and extent, within the capacity of each, but as one clear-cut professional objective, I would like to suggest the inclusion in the Council

of Foods and Nutrition of the American Medical Association, of a division in the study of non-food substances in processed foods. This idea is covered by Captain Maurice L. Silver in the November 22, 1947 issue of the Journal. Such a technical group, free from both governmental and business taint, could be invaluable in insuring a safer, more effective, dietary for all.

SUMMARY

We have pointed out some of the problems in nutrition facing the clinician including, (1) the need of further research in determining the composition of an opti-

mal diet; (2) the difficulties in diagnosing the need of improved diets while the nutritional inadequacies appear in the functional, or, at most, the early structural, hence reversible, stages; (3) the time and patience required to change the patient's eating habits, once established, and (4) the deficiencies in essential nutrients or, on the other hand, presence of harmful non-food substances in that we do recommend, and (5) the need of consumer protection through the agency of skilled chemists working independently of either government or business.

SUPERFICIAL FOREIGN BODIES OF THE CORNEA *

JOSEPH H. GOLDBERGER, M.D.

EL RENO, OKLAHOMA

About 60 years ago in England there were many factory workers who became skilled in removing small particles from the eyes of their fellow workers. In the iron and steel trades, the workmen were especially liable to get foreign bodies in the eye. In all large steel and iron works, there were always a few workmen who gained quite a reputation in removing these foreign bodies. One man who was a time-keeper where about 1000 men were employed, had been recognized for 15 years as very skillful. He had extracted as high as 10 a day. It was very infrequent that he passed a day without at least one case. He used a lancet, which he kept clean by pulling it on a strop or wetstone. He was called a "mote remover." According to Webster a "mote" is a very small particle. Without a doubt many of these motes were skillfully removed, but on the other hand in some cases there was a great deal of bungling, both as a result of unsuitable instruments and from lack of sterilization. These mote removers would back the man against the wall, and without using anesthesia, proceed with the task at hand.

In large industrial organizations today we have modern medical care available at all times so that there is no doubt that the disabling sequellae from foreign bodies in the eye are much less frequent and less ser-

ious than they were 60 years ago. This paper will deal with superficial foreign bodies of the cornea as it is the most frequent of all eye injuries. It constitutes about 25 percent of these injuries.

Foreign bodies in the cornea although usually of little consequence can lead to serious complications with loss of vision. This condition is treated by all members of the profession. Even non-professional individuals try their luck in extracting these particles. The acuteness of pain, and the suddenness of onset demands immediate attention, so that most everyone at some time in life is confronted with this condition either as a patient, or as a good Samaritan. The cornea is very important to the individual and the function of the cornea depends upon its transparency.

Any condition which interferes with the transparency of the cornea, interferes with the vision of the eye. A very small particle can lead to ulceration and scar formation in the cornea.

It is of importance in understanding our subject to consider some of the characteristics of the cornea, especially because they differ in many important respects from those of other tissues. First, the cornea receives its nourishment by a process of simple diffusion of the intra-ocular fluid from the circumcorneal area. The fluid dialyses from the blood vessels and the diffusion

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takes place from the vascular plexus around the limbus, or from the fluid in the anterior chamber. This is quite different from the other body tissues, which are richly supplied with blood vessels. Second, the metabolism of the cornea is slow. Diffusion of the nourishing fluid takes place thru out the substance of the cornea as there are no pre-formed channels like lymphspaces or vessels. Third, there is a unique respiratory mechanism at the surface of the cornea—oxygen passes into the cornea from the atmosphere and carbonic acid passes out. Fourth, the extreme sensibility of the cornea is a protective characteristic.

It follows, therefore, that the two important considerations are the avascularity of the cornea, and the transparency of the cornea.

The pathological processes are sluggish, chronic, and somewhat intractable as a result of the lack of blood vessels, or lymphspaces.

Upsets which are considered slight in other tissues such as edema or tissue tension, are a serious matter to the cornea because its transparency is interfered with—and this is its dominant role.

Next in taking up a consideration of the epithelial covering of the cornea, we find that it is delicate, exposed, and has a low temperature, because of constant evaporation at the surface. It has an insecure anchorage to a smooth membrane beneath, because it slips readily over Bowmans membrane. In contrast to the epidermal layer of the skin which has a rich blood supply, —the epitheliæ layer of the cornea must derive its nourishment by diffusion.

Not withstanding these disadvantages the epithelium affords a remarkable safeguard against trauma because of the extreme delicacy of its sensitivity, and against infection because its superficial cells are impervious to all toxins which are ordinarily present except the gonococcus and diphtheria toxins.

When trauma and infection act together the epithelial barrier is broken. The deeper structures are vulnerable since Bowmans and Descimets membranes are permeable to toxins and the substantia propria is slow to mobilize defenses. In an uncomplicated wound the epithelium undergoes rapid healing, and when it alone is traumatized as by abrasion no permanent defect results. There is ingrowth of the cells from the sides.

The epithelium has a strong tendency to level or even up all irregularities of the corneal surface. So great is its regenerative capacity that epithelial cells may cover the margin and floor of an ulcer and even penetrate the ulcer and mingle with pus corpuscles between the lamellæ of the substance of the cornea. So rapidly does new epithelium grow that the entire cornea can be recovered in from four to seven days.

It is not uncommon to see the entire epithelium come away after the use of a strong cocaine solution—then within 48 hours the entire epithelium is apparently regenerated.

Wounds extending deeper than the epithelium always leave scars and opacities. Bowmans membrane is not reformed after being destroyed by wounds.

Many foreign bodies simply adhere to the corneal surface—others cause a break in the epithelium. A third group penetrate into the corneal substance and remain impacted. Those that pass entirely thru the cornea and into other structures will not be considered in this paper.

A great many foreign bodies are characterized in their symptomatology by a sudden onset, great pain, scratching sensation on batting the eye, redness, swelling, and copious flow of tears. Spasm of the lids is great in sensitive individuals. The face is congested and the patient holds his hand or handkerchief to his eye to keep the lid from rubbing.

Usually immediate stoppage of work is necessary. If the foreign body is located where the lids rub continually in the act of winking, the irritation is severe.

Sometimes on the other hand a small foreign body may be driven against the cornea so forcibly that it lodges under the epithelium, and at first gives rise to but little inconvenience because it offers no surface to grate against the lid. Patients may carry these foreign bodies for days and attribute their sufferings to other causes. Such cases are candidates for improper diagnosis unless a thorough examination is made. Many patients have been treated for conjunctivitis when an unrecognized foreign body was at fault.

In making diagnosis about the eye, the usual methodical routine necessary in all medical examinations is very important. One cannot just flash a light in the eye and immediately make a diagnosis. A step by step procedure is followed in a careful manner.

The patient frequently can tell you just when the foreign body entered the eye. If not, a history of doing some type of work which could cast small particles about may be elicited on questioning.

Under condensed and brilliant illumination the foreign body may be easily seen. Sometimes as in the case of emory particles, their location is only brought out by staining with two percent fluoresceine or one percent mercurochrome. The cornea must be viewed from several different angles. An isolated dark pigment area in the iris must not be mistaken for a foreign body in the cornea. I have seen this happen. Abrasions are easily missed unless stains are used. Patients frequently advise the Doctor that the foreign body is up under the lid and that he will not have to look any further.

All acute inflammations of the eye should be stained routinely for an examination as to the possibility that a small particle may be lodged in the cornea.

Early removal of a foreign body in the cornea gives greater assurance of a better outcome. It should not be made to come out of its own accord. Thorough anesthesia affords greater cooperation of the patient. Once percent pontocaine solution is excellent. Two or three applications may be necessary in a profusely lacrimating eye. Time should be allowed for total effect to take place before beginning removal of the foreign body. A lens to condense the source of light so as to give a concentrated brilliant illumination is a necessity. Binocular magnifying glasses bring out the cornea in bold relief and afford greater visibility. The patient should keep both eyes open, and fix on some distant object.

Of the many foreign body spuds, an ordinary 20 gauge needle on a five cubic centimeter syringe is useful in some cases. Dental type burrs are used to remove the stain at the edges of a crater made by a piece of rusted steel or iron. A little practice in removing these particles is helpful. One type of instrument will not serve for all the various foreign bodies one encounters. Each surgeon has his favorite instrument or group of instruments. Some particles leave a small stained ring. It is imperative that this ring be removed as it acts as a foreign body itself. It should not be expected to "slough out."

Examination of the upper lid for injury to its conjunctival surface may reveal a

possible source of infection, such as an ulcer, or lacerated area which if overlooked may lead to the infection of the corneal wound.

Small foreign bodies which are simply adhered to the epithelium require simple touching with a very small cotton tipped applicator previously moistened in sterile saline or some other harmless solution. A word of caution in using this method is advised, for if the apparently superficial foreign body does not come away with ease, no attempt should be made to wipe or rub it off, this is not only futile, but causes an abrasion of the corneal epithelium which results in unnecessary pain later and predisposes to infection and recurrent corneal erosions at a later date.

Very fine particles can be removed under the slit lamp. Patients with nystagmus may be handled by making firm pressure on the eye ball thru the lids with the thumb and index finger. In this way movement of the eye can be controlled.

In elderly patients the tear sac should be investigated for chronic infection. Infants and small children require special care. They may be mumified in a sheet after a sedative is given. Lid retractors may be necessary. In some cases a general anesthetic is required with lid retractors and fixation forceps to steady the eye ball.

In the after care of these conditions the question of bandaging and medications arises. If the eye is quite irritated and considerable curettage was done, then two percent homatropine is instilled into the sac to relax ciliary spasm, and a bandage applied. Infection must be guarded against. It is recommended that medication be applied topically very frequently the first 24 hours. A selection of the type of medication to combat infection depends upon the degree of trauma. Mild trauma usually requires nothing more than boric acid solution, five percent neosilvol or one-half grain of zinc sulfate to the ounce of boric acid solution. More severe trauma may indicate five percent sulfadiazine ointment, 10 percent sulfacetamide ointment or 30 percent sulfacetamide solution. Penicillin topically seems to have a larger number of allergic reactions.* A prescription for two percent Butyn ointment or one-half Pontocaine ointment is given to the patient to be used as needed for pain until healing takes place. This affords gratifying comfort of the patient, and allows the physician freedom from calls during the night. When these

are given it is wise to protect the anesthetized cornea with a bandage. Bandages, cycloplegics, and anesthetics need not be used, if the foreign body is superficial, if irritation is minimal, and if no extensive scraping of cornea was done.

The prognosis for these superficial injuries is good. Relatively few are followed by infection. In going over my records for the past two years, I find that of approximately 255 cases of all degrees, only five

developed ulcers. These developed in situations where the foreign body had been in the cornea from two to three days, and where considerable instrumentation was necessary for its removal. Over half of all these injury cases were Rock Island railroad men, who have learned to seek early care.

*Since preparation of this paper Aureomycin and Bacitracin have come on the market. It is recommended that they be given trials as prophylactics in these conditions.

THERAPEUTIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pharmacology, Medicine and Pediatrics*

CARDIAC EMERGENCIES I

ARTHUR A. HELLBAUM, PH.D., M.D., R. Q. GOODWIN, M.D.,
ROBERT H. BAYLEY, M.D., PAUL W. SMITH, PH.D.,
BEN H. NICHOLSON, M.D.

DOCTOR HELLBAUM: A conference on some phase of medicine, surgery, or the specialties is held at 4:00 p.m. Monday through Friday in the Auditorium of the School of Medicine. While these conferences are primarily for Junior and Senior medical students, they are also available to all physicians as a supplement to the regular post-graduate courses sponsored by the School of Medicine. The schedule is as follows: Monday — Therapeutic Conference; Tuesday — Internal Medicine Conference; Wednesday — Clinical Pathologic Conference; Thursday — Alternately, Pediatrics or Obstetric and Gynecologic Conference; Friday — Surgical Conference.

This is the first of a series of two conferences on the treatment of acute situations arising in patients with cardiac disease. In keeping with the purpose of a Therapeutic Conference, we will assume the diagnosis has been made and will discuss only the treatment of the condition under consideration. Dr. Goodwin will discuss the treatment of acute congestive heart failure; Dr. Bayley will discuss the arrhythmias and other mechanism disorders; Dr. Nicholson will speak on cardiac emergencies in children; and Dr. Smith will discuss some of the drugs used in the treatment of cardiac emergencies.

THE TREATMENT OF ACUTE CONGESTIVE HEART FAILURE

DR. GOODWIN: The patient usually has

both right- and left-sided heart failure; however, you will occasionally see a patient with either right- or left-sided failure. The patient with right heart failure is not so often an acute emergency. The patient with left heart failure, on the other hand, is frequently an emergency. This patient has dyspnea, and dyspnea is a very serious symptom in these cases. He is in acute distress and must be given immediate relief. The first requirement in the treatment of a patient with heart failure is adequate dosage of tincture of rest, but this patient is unable to rest because of the severe effort required to breathe. In order to obtain rest it is often necessary to use opiates. In a patient with severe dyspnea and orthopnea, I would rather have an opiate such as morphine than I would to have a shot of digitalis. They of course go well together, but rest is necessary. The patient with acute heart failure also needs to be more completely oxygenated, and this is possible by the use of oxygen either by nasal tube, or preferably by a mask if this is not the source of too much discomfort for the patient. After rest and oxygen have been provided then digitalis is the drug of choice. In most cases of heart failure, our primary purpose is to restore the tonicity or contractility of the heart and to slow conductivity so that a more efficiently operating myocardium will be able to do the work required for the maintenance of ordinary activity. I know of no drug which will affect these two charac-

teristics of the myocardium without also affecting the other characteristics of the cardiac muscle; namely, irritability, rhythmicity, and refractivity. The drug of choice for the treatment of heart failure is, of course, digitalis. The effects of digitalis on conductivity and tonicity are desirable. The effect on irritability may be undesirable, but we have to take the bad with the good.

We may then, divide the therapy of acute heart failure into three parts: symptomatic, substitutive, and specific. Symptomatic relief is afforded by the use of opiates in giving the patient rest and relieving the acute dyspnea. Substitutive therapy is provided by giving oxygen. The specific treatment of cardiac decompensation is digitalis.

THE TREATMENT OF ARRHYTHMIAS

DR. BAYLEY: Cardiac emergencies are relatively few. Most emergency situations connected with the vascular tree are extracardiac. There are a few disturbances of mechanism which create a cardiac emergency. One of these is auricular fibrillation. This is one of the most common arrhythmias. Auricular fibrillation occurs in paroxysms in people without any other evidence of heart disease. It also occurs in connection with chronic heart disease, usually relatively late when the patient has a large heart. The disorder tends to come in paroxysms and in the early attacks the ventricular rate is very fast. It may be as high as 200 a minute or more. After several bouts of auricular fibrillation have occurred, it may become chronic and the ventricular rate may become slow. When the rate is slow, no emergency exists. Our concern then is with auricular fibrillation and rapid ventricular rate. These people get a feeling of weakness and may actually faint. The pulse is unsteady, and the rate is so fast that the heart has no chance to fill. The treatment is to slow the rate immediately. This is best done by the use of strophanthin, a digitalis-like preparation, one of the cardiac glycosides which will have its full action within two hours. Ouabain or crystalline strophanthin, or strophanthin K, are all used. They are given intravenously, never by mouth, since they are not absorbed from the gastrointestinal tract. The dose is 0.5 mgm, varying in adults from 0.3 to 0.5 mgm. By using this drug with its full action occurring in two hours, we are then in a position to judge whether the patient needs an additional amount after only a two hour wait. Occasionally one can use digitoxin which acts as rapidly by mouth as it does by vein.

In this instance one cannot judge the full effect of the drug until six hours have elapsed; thus if the dose has been insufficient, one must wait six hours rather than two hours as with strophanthin.

Another mechanism disorder is auricular flutter. Auricular flutter is no where near as common as auricular fibrillation. Here the circus movement is much more organized than in auricular fibrillation, and the ventricular rate is usually higher. The rate of ventricular beating is ordinarily dependent upon the grade of block in the junctional tissue. The rate is usually a multiple of 75; for example, 150, 225, 300, or more, and the faster the rate the more the emergency. One has a choice of two drugs here. The first choice would be quinidine sulfate. In giving quinidine, it is important to give a test dose of 0.2 Gm., because some people are very sensitive to this drug. If no untoward symptoms have developed within two hours, we may then go ahead with quinidine to treat the rapid heart rate. We may give either 0.4 Gm. every two hours or 0.2 Gm. every hour, not to exceed 2 Gms. in any one day. Much of the effect of quinidine is over within an hour, and approximately 90 percent is gone within two hours. Frequently, after continuing this drug for several hours, the mechanism will be stopped. Occasionally this procedure will not work; and quinidine having failed, we may use digitalis. Digitalis decreases the number of beats which reach the ventricles, which is the same mechanism which is used in treating auricular fibrillation to decrease the ventricular rate. There are times when we want to treat auricular fibrillation with quinidine — that is to cure it rather than merely to slow down the ventricle. In these cases, as a rule we digitalize the patient first and then use quinidine in trying to stop the mechanism disturbance. The reason we digitalize the patient before using quinidine is that quinidine may increase the rate of ventricular beating unless digitalis has been given previously. Digitalis itself will occasionally stop a flutter, and occasionally stop a fibrillation. Routinely, quinidine is used for the former.

QUESTION: Dr. Bayley, What is Stokes-Adams syndrome and how is it treated?

DR. BAYLEY: This is a mechanism disorder characterized by a very slow rate, with sometimes a temporary stoppage of the heart beat. We refer to this condition as Stokes-Adams syndrome. There may be disease which is damaging the junctional tis-

sues so that no auricular impulses reach the ventricles. In these cases, there may be a lapse of time or an appreciable interval between the stoppage of the impulses from the auricle and the beginning of the idiopathic ventricular rhythm. If this lapse of time exceeds more than a few seconds the patient loses consciousness and may have convulsions. This situation is an emergency. An idiopathic ventricular rhythm is needed. In other patients there is complete heart block and the ventricular pacemaker is not adequate. The heart may function satisfactorily for a while, and then stop for long periods with only an occasional beat. It is during this time that we have an emergency situation. The drug here is epinephrine 1:1000 in amounts of 0.5 to 1.0 c.c. intravenously, or since circulation has ceased because the heart has stopped it is better injected into the heart itself. There is another condition in which the heart may have a long pause and cause an emergency situation. This is a hypersensitive carotid sinus. It is usually seen in old people with hypertension. They turn the head, a stiff collar presses on the carotid sinus and the heart stops. The treatment of this condition usually requires avoiding pressure on the hypersensitive carotid sinuses. Medication is not needed; the patient needs instruction.

QUESTION: Dr. Bayley, how is tachycardia treated?

DR. BAYLEY: Paroxysmal tachycardia certainly deserves discussion at this time. There are two types of paroxysmal auricular cardia. The first is paroxysmal auricular tachycardia which may occur with or without block. When no block is present the ventricular rate may be very fast and an emergency situation exists. We can frequently stop an attack of this type by massage of the carotid sinus. Anything that stimulates the vagus will frequently stop an attack of paroxysmal auricular tachycardia. Pressure on the eyeball, or inducing vomiting with a teaspoon of syrup of ipecac will often produce this result. Some attacks are quite stubborn. After these procedures have been used and the condition still prevails, then either digitalis or quinidine may be used. If digitalis is used, it should be given in a rather large dose of at least half the amount required for digitalization. Slow digitalization will usually not help. Quinidine is used in the usual manner, beginning after a test dose.

In ventricular tachycardia, the situation is quite different. Here the ventricles are

usually irritable and the patient most frequently has serious heart disease. Volleys or runs of ventricular extrasystoles, which are closely related to ventricular fibrillation, are present. Ventricular paroxysmal tachycardia is very serious as a rule. It tends to occur in patients who are already sick and is thereby the more serious. Here we have one drug which is important; that is quinidine sulfate. Digitalis is actually contraindicated in paroxysmal ventricular tachycardia. The increased irritability caused by digitalis may convert the paroxysmal ventricular tachycardia to ventricular fibrillation and cause death.

CARDIAC EMERGENCIES IN CHILDREN

DR. NICHOLSON: There are not a great many cardiac emergencies in children, but those we see are very definite. The first that we frequently encounter is the child with congenital heart disease who is cyanotic at birth and continues to be cyanotic until he dies. Some of these children have a type of defect in the heart which is incompatible with life; such as trilocular heart, bilocular heart, or some other cardiac defect. So far as I know there is only one thing to do and that is to give oxygen, which does not help a great deal. Apparently the only reason these children live as long as they do is that they are well saturated with oxygen when they are born.

Other types of congenital heart disease which are compatible with life occasionally present emergency situations. An example is the child with tetralogy of Fallot who may be subject to attacks of paroxysmal dyspnea and may himself assume a position to assist him in controlling the attack. If position does not give relief, perhaps morphine is the best drug to stop the paroxysm.

Occasionally we see a child with acute heart failure associated with acute nephritis. This is a real cardiac emergency. Of course the management of the nephritis itself may help to avoid this condition. Measures to reduce hypertension, such as magnesium sulfate and the proper limitation of fluids, may help but even so, these patients often develop an acute pulmonary edema. It may be necessary in these cases to bleed the patient.

Of course, we also have arrhythmias in children, but these are treated much the same way as an adult would be treated.

There are two types of acute heart failure which occur with diphtheria. One is early failure in diphtheria and the other is late.

Early failure occurs within the first few days of the disease in which the conducting system in the myocardium is damaged by diphtherial toxins. The heart fails, the patient has abdominal pain, he vomits, he gets dyspneic, and he dies. We have no very specific measures for treating this. Attempts at therapy may be made with hypertonic glucose solution. Of course, the best treatment is prevention, or if not prevention, then the early administration of adequate doses of antitoxin.

Late failure may occur weeks after the onset of diphtheria. This occurs in the process of repair in a heart in which there are not too many good fibers anyway. The few remaining fibers are choked out by new blood vessels, inflammatory cells, phagocytic cells, and by the fibrous tissue which replaces the damaged myocardium. These patients go into peripheral circulatory collapse and die. The management is unsatisfactory; any way it is attempted. We do give these children glucose and pressor substances to try to maintain their blood pressure.

We also have peripheral circulatory failure in patients with croup, and obviously the only way to treat these patients is to insure an adequate airway, by tracheotomy if necessary, and by giving oxygen.

I have seen one case of heart failure in an infant who was born with an omphalocele into which all the abdominal content had herniated. This baby was taken to surgery and the viscera were pushed back into the abdomen. A rather tight binder was applied with Ace bandage. This child went into circulatory failure which was relieved by loosening the dressing.

DISCUSSION OF THERAPEUTIC AGENTS

DR. SMITH: Oxygen has been mentioned as a therapeutic substance that is most useful in an acute emergency. I would like to mention a few things about the methods of giving it. The methods usually available at the hospital are the nasal catheter or the oxygen tent. Theoretically, the best way of giving oxygen is by a mask. Usually masks are available, but the patients do not like to use them. One of the main considerations is the percentage of oxygen that can be made available by these methods. The use of oxygen without some means of measuring the percentage available to the patient is frequently a snare and a delusion. Frequently when an oxygen tent is used there are so many leaks that it is very difficult to maintain a 50 percent concentration of oxy-

gen except by a very high rate of flow. By rule of thumb, a 50 percent concentration is considered to be the point above which we benefit and below which we fail to aid the patient. The demand mask and valve which was developed for the army air forces is a very nice device which delivers oxygen from a high pressure source at atmospheric pressure only while the individual is inhaling; exhalation is to the atmosphere. I feel this device should be available to every individual physician for emergency use.

One of most efficient methods which I have seen for combining oxygen and rest is that of putting the patient with acute congestive failure in a respirator so that he is relieved of the effort required in breathing, the respirator being equipped with a means of supplying oxygen at a high percentage, approaching 100 percent. I have seen this method used in one instance; the cyanosis cleared up within a matter of minutes, and the patient was soon sleeping soundly. One difficulty which may be encountered here is that not infrequently patients fight against the respirator instead of adjusting to it. Next to the mask the nasal catheter is probably the second best method in terms of the concentration of oxygen available to the patient.

There are two other things that I would like to mention with regard to heart disease, but I shall put them into the form of questions.

First: What is the place of diuretics in the treatment of congestive failure on an emergency basis?

DR. GOODWIN: There is probably no drug which is more useful when used as an adjunct to the treatment of the patient with generalized anasarca than are the diuretics. There are several good mercurial diuretics on the market, such as salyrgan and mercurpurin. We usually prefer to acidify our patients with such a drug as ammonium chloride in order to get a better effect from the mercurial diuretic. There is, however, no contraindication for the immediate use of a diuretic provided that you have no acute renal pathology.

DR. SMITH: My second question concerns the use of digitalis prophylactically in patients who are threatened with an impending cardiac emergency. From a theoretical point of view the administration of digitalis before the heart begins to fail would do more harm than good.

DR. BAYLEY: Whether or not digitalis should be given to the patient as a pro-

phylactic measure depends almost entirely on whether or not there is definite cardiac dilatation. Digitalis may actually decrease the cardiac output of the patient with a normal sized heart, but we have a whole group of patients who have larger than normal hearts and who are still asymptomatic. This is the group I am interested in at present. Enlargement represents a decrease in cardiac efficiency. Digitalis increases cardiac efficiency in enlarged hearts. It is conceivable that one might delay the onset of decompensation in a patient who, for example, has hypertensive heart disease and a modest degree of cardiac enlargement. We might delay the onset of heart failure by months or even years by the continued use of digitalis. I routinely recommend the use of digitalis in patients who have moderate or more cardiac enlargement; particularly, if it is due to increased work load on the heart. There are of course a number of other causes for cardiac enlargement in which digitalis will have very little effect. Among these might be myxedema heart; and a large heart of nutritional deficiency. When these types of disorders are the cause of cardiac enlargement we can expect little or no benefit from digitalis. In those patients with hypertensive heart disease, or where there is a valvular disorder and there is an actual increase in the work of the heart as a cause of the cardiac enlargement. Here digitalis may or may not be given, but the onset of actual clinical failure may be postponed by the use of digitalis. In people who have clinical signs of heart disease without cardiac enlargement; patients, for example with a murmur and no evidence of failure, and the heart has not begun to enlarge, I believe that digitalization is definitely contraindicated.

QUESTION: Dr. Bayley, how would you treat a patient who has had auricular fibrillation over a period of time and has already thrown one embolus?

DR. BAYLEY: That is a subject which is open to argument. My treatment, however, is to treat them the same as any patient with auricular fibrillation. The argument exists over whether we are going to precipitate further emboli from the thrombus which has formed in the atria during fibrillation. My answer to this is that we can not usually stop auricular fibrillation which has been present for a long time. You cannot stop it ordinarily, except in people who have it in paroxysms and have otherwise normal hearts, or in people with toxic

goiter. Whether it is a different mechanism or not, I don't know. I think it must be. Personally, I wouldn't hesitate to go ahead and try. The deaths from embolism caused by stopping fibrillation; the thrombus being forced out by the strong contraction of the heart are rare indeed. I doubt if there are more than one or two reported in the literature. These very few cases, however, have been so over-emphasized that we are now afraid of attempting to convert auricular fibrillation back to the normal mechanism. Where it occurs in paroxysms, it can be prevented between attacks by the use of quinidine. In those cases of auricular fibrillation associated with toxic goiter, after the metabolic rate has been brought back to normal levels by thyroidectomy, approximately 60 percent will revert back by themselves. The remaining patients should be converted, two weeks after operation, before they leave the hospital. They are usually very easily converted.

QUESTION: According to the literature, the patient with acute early heart failure should be treated with oxygen, a mercurial diuretic, hypertonic glucose, morphine, aminophylline and rest. Some of these authorities lead us to believe that the acute distress these patients have can be relieved in a matter of minutes by this method. They indicate that these other drugs are more important than digitalis in the acute emergency situation. Digitalis of course may be used later to prevent the recurrence of symptoms. I should like to hear Dr. Goodwin and Dr. Bayley discuss this problem.

DR. GOODWIN: The pathologic physiology of this disorder is based on a lack of efficiency of the cardiac muscle. In these cases the pulmonary edema is caused by the fact that the dilated left heart is unable to carry out its work at a sufficient rate. Because of this fact, I know of no greater indication for digitalis than we have in this type of patient. I usually use one of the purified cardiac glycoside preparations such as digitoxin.

DR. BAYLEY: I have nothing to add except that if we used strophanthin, we might have a better opportunity to evaluate our results earlier and also the patient would get more rapid therapeutic effect. As to whether I would use digitalis or a mercurial diuretic — if I was interested in treating the edema alone, then the diuretic would be my choice. To treat cardiac decompensation per se, digitalis is the drug of choice because this heart is failing and certainly, if we can im-

prove the contractions of the heart so that we have a more normal pressure differential between the heart and the aorta then we will improve the coronary flow which is a consideration in this disease. Of course the most dramatic thing that can be done to these patients, and I would like to add this to Doctor Smith's statement, is to use a meter mask with positive pressure oxygen. By the use of this device the edema fluid is "forced back" into the circulatory system where it belongs. The patient may by this means be revived dramatically in a matter of minutes. Every hospital and every doctor should have a meter-mask available.

DR. JACK DONNELL: With the possible exception of using positive pressure oxygen, probably the most dramatic results in the treatment of patients with acute heart failure in which dyspnea is the chief complaint, are obtained by the use of morphine. The basis for the therapeutic use of morphine in this case is the damping of the Hering-Breuer reflex. This is the nervous mechanism which tends to limit respiratory excursions. It results from stimuli which pass up the vagus from the sensory endings in the lung and tends to limit both inspiration and expiration. It is initiated by stretching or collapse of the alveolar tissue as the result of changes of intra-alveolar pressures. In pulmonary edema there is a change in pres-

sure both intra-alveolarly and in the inter-alveolar septa in which the sensory endings lie. Once this reflex has been depressed, then the patient's dyspnea improves dramatically. Other poorly defined reflexes are probably also affected by morphine in reducing dyspnea. The use of diuretics and the rest which has been made available to the patient by the use of morphine then usually will tip the balance back toward a compensated heart, and the patient may thus be able to get along for a period of time without digitalis. As Doctor Bayley has mentioned, it might be a good idea in these patients to give them digitalis in order to postpone the recurrence of decompensation; however, since even the rapidly acting intravenous strophanthin group of drugs does not begin to take action for from 20 to 30 minutes and the full action has not been obtained for approximately two hours, the use of morphine, and mercurial diuretics, along with the rest which is made available by morphine, may mean the difference between the patient's life or his death, until such time as the cardiac glycoside has begun to take effect.

DR. HELLBAUM: Cardiac emergencies associated with angina pectoris, myocardial infarction, and the problems of pericardial effusion and cardiac tamponade will be presented at the next session.

TWENTY-FIVE YEARS AGO

Dr. H. C. Manning, Cushing, has removed to a new home a short distance from the Municipal Hospital.

Dr. Shade D. Neely, Muskogee, was married to Miss Leila Roberta Hampton, at Tulsa, on Sunday January 6, 1924.

Oklahoma County Medical Society plans a medical library for Oklahoma City, which will be open to the public as well as the medical profession. For the present it is expected to have the library in a section of the Carnegie Library. Drs. W. L. Dersch, W. H. Miles and D. D. Paulus have been appointed a committee to collect and install the library.

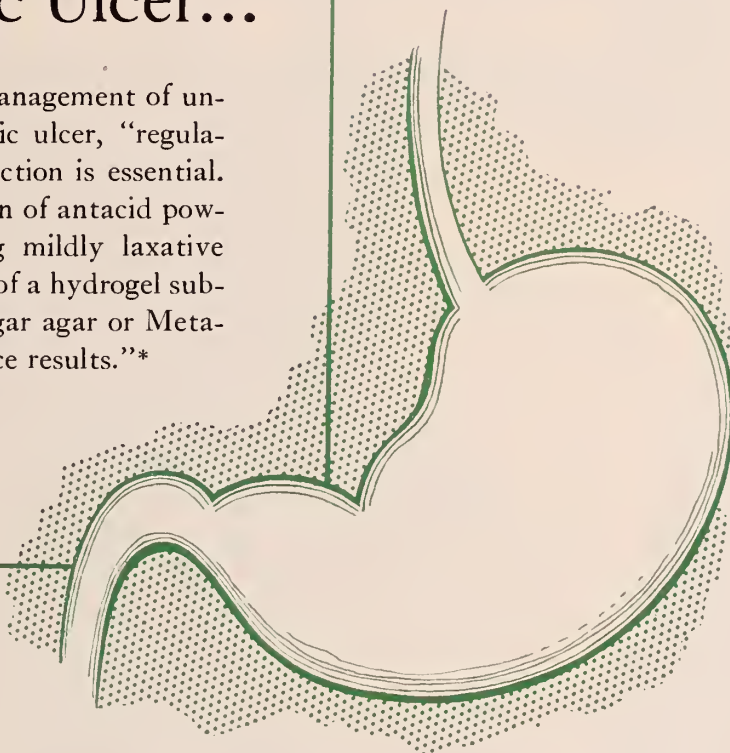
Oklahoma Board of Medical Examiners has just completed reciprocity upon the basis of examination only with the Board of Medical Examiners with the State of Louisiana.

Dr. Charles E. White, Pawhuska, has removed to Muskogee, and has been appointed City Physician in charge of the new Muskogee General Hospital.

Dr. Leila E. Andrews, Oklahoma City, accompanied by her sister Miss Mae Andrews plan to sail June 20th, on an extended tour of Europe, visiting England, France and other countries, returning in September.

Bowel Regulation in Peptic Ulcer...

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

*Gerendasy, J.: Modern Treatment of Peptic Ulcer, J. M. Soc. New Jersey 43:84 (March) 1946.

President's Page

Plans are almost completed for an interesting annual meeting of the Oklahoma State Medical Association to be held in Tulsa in May. I feel sure that all of the County Societies have elected delegates and that the doctors over the State will plan to attend the meeting. All of you may be sure that every effort will be made to arrange a scientific program that will appeal to you. You also can look forward to the annual dinner meeting at which an authoritative speaker will be presented who will speak on the economic and social problems in the practice of medicine today.

I trust that you and your families will take advantage of the opportunity to attend this important meeting.

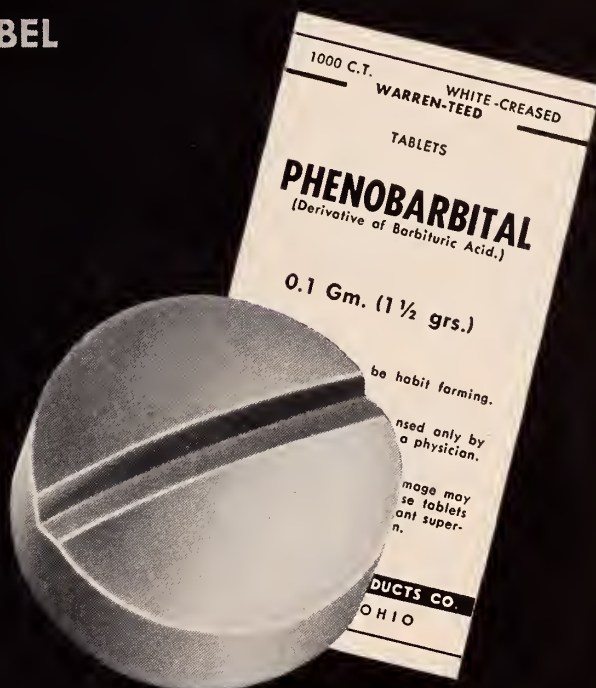
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GENERAL NEWS

LEGISLATURE WILL STUDY MEDICAL BILLS

Since January 5 the Oklahoma Legislature has been in session and at Journal press time no legislation of major importance to the medical profession had been introduced. The Board of Medical Examiners plans to secure the introduction of several bills during this session. They are:

1. Providing for the suspension or revocation of license of doctors of medicine who are declared insane.
2. Granting the power of injunction to the Medical Board to prevent violations of the Medical Practice Act.
3. Providing for the issuance of basic science certificates to those having passing grades in the required basic science subjects who took examinations prior to the passage of the basic science act.
4. Giving the Board of Medical Examiners power to require of all applicants for licensure in the State of Oklahoma, a properly certified statement that they have served a one year's internship in a hospital recognized by the Board.

Each of these bills has been drawn by the Board of Medical Examiners and has received the approval of the Council of the State Medical Association. It is not anticipated that any of these bills will encounter any organized opposition. If opposition does develop, it will be necessary for the Public Policy Committee to enlist the aid of the membership throughout the state in securing passage of this needed legislation.

VA EXPLAINS MEDICAL CARE REQUIREMENTS

Hospitalization and outpatient treatment provided by Veterans Administration are *not* available to members of veteran's families, VA said in response to a number of inquiries.

Many wives of veterans were treated by Army and Navy doctors while their husbands were in service. Some wives now erroneously believe they also are entitled to medical treatment from VA physicians.

Only ex-servicemen and women, if discharged under conditions other than dishonorable, are entitled to hospital treatment under the following priority system:

First—Emergency cases.

Second—Those suffering from injuries or diseases incurred in or aggravated by military service.

Third—Those who state under oath they are unable to pay hospital charges for treatment of nonservice connected disabilities or illnesses. These veterans, if not in the emergency category, must wait until a bed becomes available.

Outpatient treatment is available only for veterans with service-connected disabilities. Each veteran's eligibility must be determined by VA before treatment of this type can be authorized.

ANNUAL MEETING PLANS UNDER WAY — RECORD ATTENDANCE EXPECTED

Plans are developing for the 56th Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 15-18. The committee has announced that all booths for exhibitors have been contracted for with good response reported from all notices sent out. The program for the scientific sections will be announced in the April issue of the Journal with several outstanding specialists slated for the sections.

All members of the O.S.M.A. are urged to make their hotel reservations early. Requests should be mailed to the Tulsa County Medical Society, Medical Arts Building, Tulsa, Okla. Please state type of accommodation desired, number of persons, dates of stay, and time of arrival.

In addition to the scientific program, which includes lectures and roundtable luncheons, several social events are scheduled. A golf tournament will be held and the annual President's Dinner Dance is set for Tuesday, May 17.

SPECIAL ASSESSMENT DISCUSSED BY DELEGATES

The House of Delegates special session originally scheduled for January 30 in Oklahoma City was postponed until February 20 because of the weather.

This session was authorized by the Council and called by the President for the purpose of presenting to the membership of the Association as many details as possible in regard to the new Public Relations and Education program of the A.M.A. to be financed by the A.M.A. assessment of \$25.00 per member.

Gunnar Gundersen, M.D., of LaCrosse, Wisconsin, member of the Board of Trustees of the A.M.A. was to represent the A.M.A. and present its program to the House of Delegates. Due to the publication requirements of the Journal it is not possible at this time to report proceedings of the special session completely. For a detailed report on action of the House of Delegates, see the April edition of the Journal.

INTERNAL MEDICINE COURSE POSTPONED

The Postgraduate Committee of the Oklahoma State Medical Association is still seeking an instructor for the postgraduate course in internal medicine although no instructor has been hired at this time, reports Gregory E. Stanbro, M.D., chairman.

Several applicants have been interviewed and several more have been contacted by mail, it was said. The committee had planned to have the internal medicine course begin the first of the year but because of the delay in finding a qualified instructor, the course may not begin until early summer. Southeastern Oklahoma will be the first circuit according to present plans.



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ANNOUNCEMENTS

American College of Physicians—Announces postgraduate courses for the spring of 1949, as follows: Electrocardiography, basic principals and interpretation, Boston, April 25-30, Fees, \$60 for A.C.P. members; \$120, non-members. Diseases caused by immune mechanisms, Atlantic City, New Jersey, April 28-May 1, Fees, \$30 for A.C.P. members; \$60, non-members. Cardiovascular disease, Philadelphia, May 2-7, Fees \$30 A.C.P. members, \$60, non members. Physiological basis for internal medicine, Philadelphia, Pa., May 14-19, Fees, \$30 A.C.P. members, \$60, non-members. Endocrinology, Boston, June 13-18, Fees \$30 A.C.P. members, \$60, non-members.

International Academy of Proctology—Newly chartered in New York State with charter memberships, associate fellowships and fellowships now open. Further information and applications may be made by writing Alfred J. Cantor, M.D., 43-55 Kissena Blvd., Flushing, New York.

American Nurses' Association—More positions are open for men nurses today that there are applicants, reports the A.N.A., which has recently launched a campaign to enlist the entire nation in a united effort to overcome the present nursing shortage. Public health, industrial and psychiatric nursing are especially suited for enterprising men who wish to enter nursing as a profession, it was said.

Oklahoma Academy of General Practice—First annual session March 18 and 19 in Shawnee. Information can be obtained from the O.S.M.A. Executive Office, 210 Plaza Court, Oklahoma City.

American Academy of General Practice—Scientific assembly, first annual, Netherlands Plaza Hotel, Cincinnati, March 7, 8, 9.

American Medical Association—Annual session, June 6-10, Atlantic City, New Jersey.

Oklahoma State Medical Association—Annual Meeting, May 15-18, Tulsa, Oklahoma.

Southwest Allergy Forum—April 4 and 5, El Paso.

Chicago Medical Society—Fiftieth annual clinical conference, Palmer House, March 1, 2, 3, 4.

The Veterans Administration received 76,945 requests for physical examinations during the month of October, 1948.

RURAL HEALTH CONFERENCE ATTENDED BY OKLAHOMANS

Attending the National Conference on Rural Health at the Palmer House, Chicago, February 4 and 5 were M. H. Newman, M. D., Shattuck, member of the O.S.M.A. rural health committee; Max Shanholtz, M.D., Wewoka, State Health Department; and John Hart, executive office representative.

John Hart also attended a meeting at Kansas City February 3. The Kansas City conference was sponsored by the Kansas State Medical Association and all states west of the Mississippi were invited to take part in the discussion on rural health problems, especially in regard to what can be done in securing cooperation from the American Farm Bureau Federation.

PUBLIC POLICY COMMITTEE NAMES FULL-TIME SECRETARY

Miss Jean McDuff has been named secretary to the Public Policy Committee of the O.S.M.A. and will work as a full-time employee in the Executive Offices.

Miss McDuff will prepare material for all types of subjects for which there is a sub-committee and help keep the program of all the sub-committees under the public policy committee working. These are: professional relations; radio, newspaper, public speaking; awards, contests, and literature; and visual education.

A graduate of the University of Missouri, majoring in journalism, she also attended the University of Oklahoma before going to M.U. For several years she has done newspaper and advertising work having been employed on a newspaper in Monroe, La. and as advertising manager of the Cohn Company in Little Rock, Ark. While in Little Rock, she was on the Board of Directors of the Little Rock Advertising Club and represented the organization at the Advertising Federation of America in Boston in 1947.

PUBLIC RELATIONS GROUP MEETS AT A.M.A. OFFICE

The initial meeting of the advisory committee on the public relations program of the A.M.A. was held February 12 in Chicago with John F. Burton, M.D., O.S.M.A. representative attending. Dr. Burton was appointed by President Northcutt as the Oklahoma representative.

This committee achieved its purpose of bringing to A.M.A. headquarters the benefit of the advice and experience of representatives from the various states who are in a position to better analyze the ultimate effect of any national program and to put the program on a state level in such a manner as to secure greatest results.

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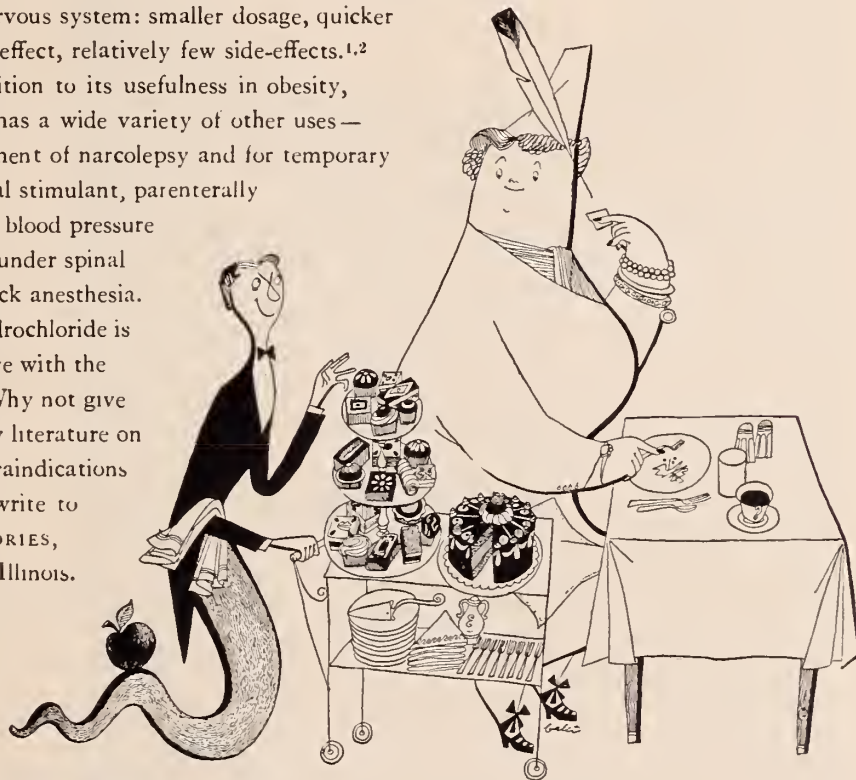
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1. Ivy, A. C., and Goetzl, F. R. (1943). d-Desoxyephedrine. A Review. War Med., 3 60, January.
2. Davidoff, E. (1943). A Comparison of the Stimulating Effect of Amphetamine, Dextroamphetamine and Dextro-N-Methyl Amphetamine (Dextro-Desoxyephedrine), Med. Rec., 156-422, July.

HAVE YOU HEARD?

Louis Buell, M.D., Shattuck, has bought an interest in the Ming-Kendall Clinic in Okmulgee and is moving to that city. The clinic will be known as the Buell-Kendall Clinic.

C. L. Benson, M.D., Cherokee, is the newly elected first vice-president of the American Business Club of Cherokee.

J. H. Goldberger, M.D., Lawton, is a new member of the Canadian county war manpower committee.

J. William Finch, M.D., Hobart, is the recently elected Kiwanis Club president in that city.

Curtis Berry, M.D., *D.G. Willard, M.D.* and *O. M. Woodson, M.D.*, Norman have moved into their new clinic building. Through their new partnership, each of the three doctors plans two weeks of post-graduate study plus two-weeks vacation each year.

First baby born in Enid in 1949 was the son of Dr. and Mrs. Avery B. Wight, jr.

C.A. Traverse, M.D., Alva, is a new board member of the Alva Chamber of Commerce.

C. E. Northcutt, M.D., O.S.M.A. President from Ponca City, spoke to the Eighth District Nurses' Association on "Socialized Medicine and its Relation to the Nursing Profession."

John R. Callaway, M.D., Pauls Valley, was named man-of-the-month of his city two years ago and during the Christmas season this year (1948) he received a box of pears from an Oregon concern because of that honor.

W. G. Dunnington, M.D., Cherokee, has recently been appointed Santa Fe railroad surgeon for that locality.

W. N. Orley, M.D., Texhoma, has recently moved into the new medical clinic in that city.

James F. McMurry, M.D., Sentinel, recently addressed the Rotary club of that city on "Socialized Medicine."

Robert L. Mitchell, M.D., Muskogee, a veteran of 27 years service with the VA hospital in Muskogee, was honored at a banquet by VA officials there upon his recent retirement.

A. B. Colyar, M.D. has moved from Atoka to Poteau as he has been appointed County Health officer of Pittsburg County.

Poul Nesson Rolle, M.D., Seiling, has accepted the position as contract physician for the Indian service at Canton and will be there two days each week.

N. C. Gaddis, M.D., and Mrs. Gaddis were guests of honor at a farewell party in Tipton. Dr. Gaddis is now practicing in Tulsa.

Felix M. Adams, M.D. and *Orville L. Grigsby, M.D.*, Nowata, have recently combined their offices and opened a recently remodeled clinic.

Claude B. Watters, M.D., Pawnee, is a new member of the Board of Directors of the Pawnee National Bank.

A. W. Hoyt, M. D., Chickasha, spoke on the nursing care of newborn babies and ill children at the meeting of district 17 of the Oklahoma Nurses Association in Chickasha.

Charles Green, M.D., Lawton, spoke on "Health" at a January meeting of the Whittier P-TA in Lawton.

J. W. Francis, M.D., Perry, discussed "Health" at a meeting of the Billings P-TA.

John Hart, O.S.M.A. Associate Executive Secretary, spoke on "Socialized Medicine" at a recent meeting of the Cherokee Rotary Club.

James S. Petty, M.D., Gnathrie, has been appointed to the Board of Regents of Oklahoma colleges.

C. E. Cook, Jr., Cherokee, has been appointed County Superintendent of Health of Alfalfa County by Grady F. Mathews, M.D., Commissioner.

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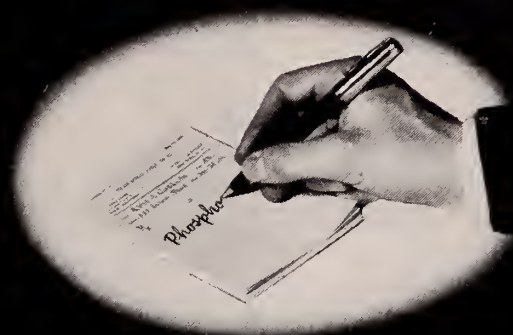
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MEDICAL SOCIETIES AROUND THE STATE

TULSA COUNTY

Dr. Anton J. Carlson, Professor Emeritus of the University of Chicago, was guest speaker at the Tulsa County Medical Society January 10. His topic was "Diet and the Life Span." At the Tulsa County January 24 meeting James B. Thompson, M.D., Tulsa, presented a paper entitled "The Role of the Transverse Abdominal Incision in the Reduction of Postoperative Complications." All members of the medical profession in eastern Oklahoma are invited to attend the scientific sessions of the Tulsa County Society, according to John E. McDonald, M.D., President of the Society.

GARFIELD COUNTY

B. J. Cordonnier, M.D., newly elected president of the Garfield County Medical Society, presided at the first 1949 meeting when Jimmy Hibbard, M.D., Wichita, Kansas, spoke on "Common Neurological Problems and Their Surgical Treatment."

POTTAWATOMIE COUNTY

"Virus Diseases" were discussed by J. N. Owens Jr., M.D. and K. W. Navin, M.D. at the regular January meeting of the Pottawatomie County Medical Society. A dinner was held preceding the meeting.

STEPHENS COUNTY

A. J. Weedn, M.D., Duncan was elected president of the Stephens County Medical Society at a recent meeting. Other 1949 officers are Jack Gregston, M.D., Marlow, vice-president; W. R. Cheatwood, M.D., Duncan, secretary-treasurer; W. S. Ivy, M.D., Duncan, delegate; Richard Ellis, M.D., Duncan, alternate; and E. B. Thomasson, M.D., new member of the board of censors.

DO YOU KNOW?

That two members of the O.S.M.A. have been appointed by Governor Turner to the State Board of Health? They are T. H. McCarley, M.D., McAlester, and Roy Fisher, M.D., Fredrick. The appointments have been approved by the Senate and are now effective. Dr. McCarley, from the third Congressional District, will serve until July 1, 1957, while Dr. Fisher's term will expire June 30, 1953.

CARTER COUNTY

A movie showing vocational rehabilitation work and speeches by representatives from that department featured the meeting of the Carter County Medical Society recently. During the business session H. A. Higgins, M.D., J. Hobson Veazey, M.D. and James T. Godfrey, M.D. were named to the program committee.

HARMON COUNTY

Life certificates in the O.S.M.A. were awarded to W. M. Yeargan, M.D. and O. J. Street, M.D. at the January Harmon County Medical Society meeting. At a recent election of officers of the society, R. H. Lynch, M.D. was named president and C. N. Talley, M.D. was elected secretary.

PITTSBURGH COUNTY

Guest speaker at the January meeting of the Pittsburgh County Medical Society was Stewart Haral of the University of Oklahoma School of Journalism. New officers were also installed at the meeting. They are: George Booth, M.D., Wilburton, president; William LerBlanc, M.D., Hartshorne, president-elect; E. D. Greenberger, M.D., McAlester, vice-president; and Homer C. Wheeler, M.D., McAlester, secretary-treasurer.

CRAIG COUNTY

Newly elected officers of Craig County Medical Society are: J. M. McMillan, M.D., president; P. L. Hays, M.D., vice-president; D. H. Olson, M.D., secretary-treasurer; L. H. McPike, M.D., P. L. Hays, M.D., and W. R. Marks, M.D., censors; and F. M. Adams, M.D., delegate, and J. B. Darrrough, M.D. alternate. All are from Vinita.

BOOK PREPARED

Soon to be issued in book form are the Ciba illustrations of anatomy and pathology which were prepared by Frank H. Netter, M.D. These full color drawings have been distributed to physicians for the last several years in portfolio form by Ciba Pharmaceutical Products, Inc., Summit, New Jersey. The book will bring together all drawings distributed up to January 1, 1948.

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MEET OUR CONTRIBUTORS

Joseph H. Goldberger, A.B., M.D., El Reno, wrote "Superficial Foreign Bodies in the Cornea" in this issue of the Journal. Dr. Goldberger was graduated from Tulane University in 1935 and limits his practice to his specialty, eye, ear, nose and throat. He is a member of the Oklahoma City Academy of Eye, Ear, Nose and Throat and was president of the Canadian County Medical Society in 1948. Dr. Goldberger is assistant division oculist and aurist for the Rock Island Railway Company and consultant in eye, ear, nose and throat at the U.S. Public Health Service Hospital, Federal Reformatory, El Reno. Before practicing in El Reno he was at Anthony, Texas. Dr. Goldberger's father did the pioneer research work in pellagra from 1914 to 1929.

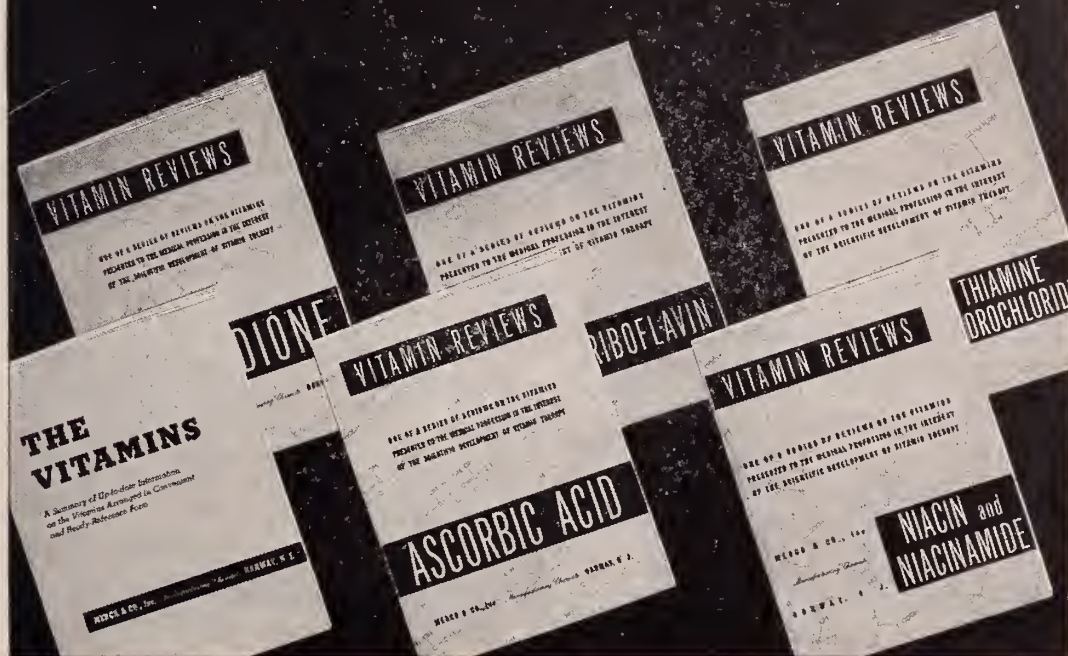
C. G. Stuard, M.D., Tulsa, wrote "Ten Years Progress in Ophthalmology" in this Journal. Dr. Stuard was graduated from the University of Oklahoma School of Medicine in 1937 and limits his practice to ophthalmology. Dr. Stuard is a fellow of the American Academy of Ophthalmology and Otolaryngology, a diplomate of the American Board of Ophthalmology and a member of the Kansas City Society of Ophthalmology and Otolaryngology. He was certified by the American Board of Ophthalmology in 1942. He is now practicing in Tulsa and is the Tulsa County Delegate. Dr. Stuard was in the army from 1941 to 1945.

Lucile S. Blachly, B.S., M.D., Oklahoma City, is the author of "Problems in Nutrition" appearing in the March Journal. Dr. Blachly was graduated from Rush Medical College in 1916 and limits her practice to her specialty, internal medicine. Dr. Blachly is now associated with the Bone and Joint Hospital, Oklahoma City, but also practiced in Drumright and did public health work with the Bureau of Maternity and Infancy, Child Hygiene, etc. in Florida and Oklahoma.

Franklin H. Top, M.D., M.P.H., F.A.C.P., F.A.A.P., Detroit, was a scientific speaker at the annual meeting and his article on "Food Infections and Intoxications" is in the March Journal. He received his medical degree from the University of Pennsylvania school of medicine in 1928 and he specializes in infectious diseases and epidemiology; public health; and hospital administration. Dr. Top is a fellow in the following organizations: American Public Health Association, American Association for the Advancement of Science, American College of Physicians, American Academy of Pediatricians (associate), and a member of the American Epidemiology Society. He is a clinical professor of the department of preventive medicine and public health, Wayne University, and non-resident lecturer, infectious diseases and epidemiology, University of Michigan Postgraduate School, Ann Arbor, Mich. From 1931 to 1934 he was resident physician and acting assistant to the medical director CD division, Herman Kiefer Hospital; 1934-1935, postgraduate work, Johns Hopkins University School of Public Health, Baltimore, Md.; 1935-1942, medical director Com. Dis. Service, Herman Kiefer Hospital, Detroit; 1942-1947, medical director, Herman Kiefer Hospital; and in 1947 he was named director of Herman Kiefer Hospital.

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BOOK REVIEWS

OCCUPATIONAL THERAPY SOURCE BOOK. Sidney Licht, M.D. Baltimore, Williams and Wilkins Company. 1948. 90 pages.

The foreward best expresses the content of this book in the statement, "Here is occupational therapy in retrospect." The book consists of a collection of original writings of historic significance in relation to the development of Occupational Therapy for the Insane.

The author in a chapter under his own name points out that Occupational Therapy might be called, "Activity Treatment" for mental patients and states that it was first recommended by Asclepiades one hundred years B.C.

A chapter is translated from the original first edition of Pinel's book, "The Use of Occupations" written in Paris in 1901. The statement is made, "Rigorously executed manual labor is the best method of securing good morale and discipline."

Another chapter is by Johann Christian Reil in 1803. This man was the first to recommend a hospital gymnasium and patient participation in dramatic production.

William S. Hallaran in 1810 is also quoted as to his opinions on exercise as treatment of insanity.

Other chapters in the book contain similar ideas devoted to the evolution and development of exercise and

work, which is now termed "Occupational Therapy."

The book is excellently written and should be of great interest to those who are interested in Occupational Therapy for the insane.—Earl D. McBride, M.D.

THE CASE AGAINST SOCIALIZED MEDICINE.

Lawrence Sullivan. The Statesman Press. Washington. 1948. 53 pages. Price \$1.50.

This brief, intelligible, readable, well-documented story by Lawrence Sullivan should be carefully read by every physician in the State of Oklahoma and placed in the hands of all influential citizens with the request that they read and write to the lawmakers in Washington who are under the pressure of illegal publicity sponsored by their employees in Washington and paid for with their money. All designed to rob them of their freedom and if successful, certain to result in deterioration of national health with a heavy strain upon honor and integrity.

This book shows what the heritage will be. All who treasure the welfare of their children should read and learn and leave no stones unturned. Those among the physicians of Oklahoma who have been regular readers of the Journal will see in this valuable little book an epitomy of what has appeared in its editorial columns during the past 10 years.

Please purchase, read and distribute.—Lewis J. Moorman, M.D.

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**Reprints on request:

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp. Biol. and Med., 1934, 32-241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.

OFFICERS OF COUNTY SOCIETIES, 1948

| COUNTY | PRESIDENT | SECRETARY | MEETING TIME |
|---------------------------------------|---|----------------------------------|---------------------------------|
| Alfalfa..... | G. G. Harris, Helena | C. E. Cook, Jr., Cherokee | Last Tues. each Second Month |
| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | W. W. Cotton, Atoka | |
| Beckham..... | T. J. McGrath, Sayre | J. B. McGolrick, Erick | Second Tuesday |
| Blaine..... | Fred Perry, Okeene | Virginia Curtin, Watonga | Third Thursday |
| Caddo..... | C. R. Waterbury, Apache | Edward T. Cook, Jr., Anadarko | Third Thursday |
| Canadian..... | J. N. Goldberger, El Reno | Jack W. Myers, El Reno | Subject to Call |
| Carter..... | Roger Reid, Ardmore | Royce Means, Ardmore | Second Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | R. K. McIntosh, Jr., Tahlequah | First Tuesday |
| Choctaw-McCurtain- Pushmataha..... | | Fred D. Switzer, Hugo | |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Fourth Thursday |
| Comanche..... | Byron W. Aycock, Lawton | E. Stanley Berger, Lawton | Second Tuesday |
| Cotton..... | A. B. Holsted, Temple | Mollie Seism, Walters | Third Friday |
| Craig..... | C. P. Chumley, Vinita | J. M. McMillan, Vinita | |
| Creek..... | P. K. Lewis, Sapulpa | Louis A. Martin, Sapulpa | Second Tuesday |
| Custer..... | J. G. Wood, Weatherford | Floyd Simon, Clinton | Third Thursday |
| Garfield..... | J. Wendell Mercer, Enid | Roscoe C. Baker, Enid | Fourth Thursday |
| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | |
| Greer..... | Fred Sellers, Mangum | J. B. Hollis, Mangum | |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | First Wednesday |
| Haskell..... | William S. Carson, Keota | N. K. William, McCurtain | |
| Hughes..... | L. A. S. Johnston, Holdenville | Paul Kernek, Holdenville | First Friday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Last Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Monday |
| Kay-Noble..... | Glenn Kreger, Tonkawa | E. C. Mohler, Ponca City | Second Thursday |
| Kingfisher..... | H. Violet Sturgeon, Hennessey | Henry C. Trzaska, Hennessey | |
| Kiowa..... | R. F. Shriner, Hobart | J. B. Tolbert, Mt. View | |
| LeFlore..... | John R. Harvey, Heavener | G. W. Hogaboom, Heavener | |
| Lincoln..... | U. E. Nickell, Davenport | Ross P. Demos, Stroud | First Wednesday |
| Logan..... | Webber Merrell, Guthrie | Phillips R. Fife, Guthrie | Last Tuesday |
| Mayes..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | Ralph Royster, Purcell | W. C. McCurdy, Jr., Purcell | |
| McIntosh..... | F. R. First, Jr., Checotah | W. A. Tolleson, Eufaula | Third Thursday |
| Muskogee-Sequoyah- Wagoner..... | George L. Kaiser, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
| Northwestern..... | R. G. Obermiller, Woodward | C. W. Tedrowe, Woodward | 2nd Thurs. Even Mo. |
| Okfuskee..... | A. S. Melton, Okemah | M. L. Whitney, Okemah | |
| Oklahoma..... | Onis George Hazel, Oklahoma City | Gerald Bednar, Oklahoma City | Fourth Tuesday |
| | | Mrs. Muriel Waller, Exec. Secty. | |
| Okmulgee..... | J. C. Matheney, Okmulgee | S. B. Leslie, Jr., Okmulgee | Second Monday |
| Osage..... | C. S. Stotts, Pawhuska | William A. Loy, Pawhuska | Third Thursday |
| Ottawa..... | F. L. Wormington, Miami | W. Jackson Sayles, Miami | Second Thursday |
| Payne-Pawnee..... | Clifford M. Bassett, Cushing | C. W. Moore, Stillwater | Third Friday |
| Pittsburg..... | G. R. Booth, Wilburton | Homer C. Wheeler, McAlester | First Wednesday |
| Pontotoc-Murray..... | E. M. Gullatt, Ada | Ollie McBride, Ada | 1st and 3rd Wed. |
| Pottawatomie..... | Jack W. Baxter, Shawnee | F. C. Gallaher, Shawnee | Third Wednesday |
| Rogers..... | Roy Melinder, Claremore | P. S. Anderson, Claremore | |
| Seminole..... | Claude Chambers, Seminole | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Stephens..... | Fred Patterson, Duncan | W. R. Cheatwood, Duncan | Third Wednesday |
| Texas..... | | E. L. Buford, Guymon | |
| Tillman..... | G. A. Tallant, Frederick | O. G. Bacon, Frederick | Second and Fourth Monday |
| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | John G. Matt, Tulsa | |
| Washington Nowata..... | L. B. Word, Bartlesville | Mr. Jack Spears, Exec. Secty. | |
| Washita..... | A. H. Bungardt, Cordell | C. L. Johnson, Jr., Bartlesville | Second Wednesday |
| Woods..... | R. A. Whiteneck, Wynoka | Aubrey E. Stowers, Sentinel | Last Tuesday |
| | | W. F. LaFon, Alva | Odd Months |

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne, Major—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE HOUSE OF DELEGATES AT HIGH TIDE

On Sunday, February 20, the House of Delegates of the State Medical Association met at the Biltmore Hotel. This was a special meeting called for the specific purpose of considering the A.M.A. \$25.00 assessment.

The groundwork had been well laid. The meeting was conducted in an orderly way. The case of the A.M.A. was carefully and clearly presented. The cause of the American people was in the hearts of all present. The deliberate, open, and frank discussion in pursuit of truth and justice was carried to a unanimous conclusion in dignified manner which could not be surpassed in any deliberative body.

Physicians, considered collectively, exhibit a high degree of honor and integrity. They possess poise and probity developed through the most sacred and intimate experiences of life. They know the heights and depths of human existence. Their deliberations take into consideration the needs of their people and there is never any excuse for ulterior motives. In medicine there is never any excuse for a departure from the pursuit of truth.

These are the intellectual, the moral and spiritual factors which characterize this sympathetic socially minded group.

Thus the delegates of the Oklahoma State Medical Association, in spite of many shortcomings, local and national, looming in retrospect, voted unanimously for the A.M.A. assessment because it is to be employed in behalf of personal freedom which has been placed on trial by the Federal Administration.

Every physician in the state should be proud of the spirit of this meeting which reached high tide.

No matter what goes on in Washington, every physician in Oklahoma should be glad he belongs to a profession which rises above all selfish interests in the cause of common weal.

FIRST HAND OBSERVATION

Apropos the government's proposed compulsory health insurance program the following from a sound, erudite medical friend, is lifted from a letter written approximately one year ago. It is of great interest and equal significance:

"For the past year and a half I have had weekly connection with government medicine and a veterans' hospital, and have been impressed with the difficulty of keeping the standards as high as they should be. I am convinced that the only influence that keeps this hospital on its toes medically is that wielded by visiting consultants. To me this means that government medicine can be nothing but a failure. Government medicine would be a disgrace to the medical profession under any arrangement. Only the stimulus of free, unhampered, broad-minded, well-trained outside medical men would save the day. I shudder at what would happen if we were all working for the government on a socialized medicine program."

DESICCATED THYROID

The endocrinologists and experienced clinicians warn against the indiscriminate use of thyroid with vague therapeutic objectives. They claim that it has nothing to do with the reduction of weight. The psychological effect may help control diet and it is the latter that reduces the weight and not the thyroid. It is claimed that except in genuine myxedema, its effect upon the metabolic rate is fleeting. An immediate slight rise will be followed by a drop to or below its former level and continued administration is useless if not harmful.

Some authorities believe that the normal metabolic rate is —8, rather than 0 and that overweight and a slightly sub-standard reading do not constitute an indication for the administration of thyroid. In the great majority of cases, overweight is due to overeating and the remedy is reduction in the amount of food ingested.

The thyroid gland is lazy and rests when

thyroid substance is supplied from without. As in the case of the initial dose, an increase in the amount given likewise leads to only a temporary rise in the metabolic rate which settles to or below its former level within a few weeks and nothing is accomplished by the attempt to speed up the rate through increased dosage.

After continued administration, its discontinuance may be followed by nervousness, lassitude, and fatigue because the thyroid seems reluctant to resume its function after a long rest. The symptoms will pass in a few weeks or months (usually three or four months) and should not cause alarm. In other words, they must not be looked upon as an indication for more thyroid substance.

No doubt many people are taking quantities of thyroid without any benefit. Such therapy is an injustice to the patient and a reflection upon the physician.

MEDICAL PRACTICE IN GREAT BRITAIN

In a recent issue of the *New England Journal of Medicine*¹, William H. Sweet records his impression after "two years as an Oxford medical undergraduate, four years in London and Birmingham during the war as a practicing surgeon employed by the Ministry of Health for most of this time, and a further recent period of work in England."

Dr. Sweet, a neurosurgeon should be able to appraise the working of the National Health Service Act — this child of the socialistic brain. His own awakening, his confession of far reaching evil and his fear for our own safety is well expressed in the following paragraph:

"I, myself, for example, have assumed that a faculty member of the staff of a teaching hospital could be little affected by any of the bruited changes — a notion that has been sharply challenged by observations of the current status of physicians in this and other categories in Great Britain. Severely jarred in my complacency by what I have seen during a recent period of work on one of the active services of a large English hospital, I am recording what are admittedly only a series of impressions rather than a careful statistical study. British physicians in all types of work have been profoundly affected by the legislation of His Majesty's Government, and we here would do well to realize that none of us are

necessarily immune to the consequence of radical departures in medical administrative procedure."

An editorial in the same issue of the *New England Journal* points out the fact that this act which came into effect July 5, 1948, simply supplemented the National Health Insurance Act of 1912 and other acts enlarging hospital coverage. This would indicate that the people and the profession in Great Britain should have developed a certain degree of tolerance and yet the facts sifting through many bonafide channels indicate the effects of the latest onslaught have been devastating.

This being the case in Great Britain, how can we hope to survive the Federal Security Agent's Compulsory Health Insurance Program coming with one fell swoop?

Sweet's searching observations reveal the sour stuff spewing from every professional category coming under the act. Since we cannot go into detail, suffice it to say that the "sorry plight of our British colleagues" will be visited upon us if we do not gird our loins and go to war with Washington.

Those who hesitate to spill their blood in behalf of freedom should have the benefit of this one detail lifted from Sweet's report. He admits that salary scales have not been set² but three of his colleagues were faring as follows:

"They are consultants with extended complete postgraduate training in surgical specialty, and they now hold full-time appointments in major hospitals. Each of these men with a family is paid about \$2500 per year after income tax deductions, and this is a representative income for such men under forty years of age throughout England. This permits each a scale of living approximately similar to that which one would obtain in this country on such an income, but the startling fact is the relation of this annual earning to that of other groups in the country. It is indeed a smaller yearly income than that of a skilled mechanic in England working far less 'overtime' than these men do. Every one of the skilled laborers in a factory of the father of one of these men has a higher income than he does after his fifteen years of higher education and postgraduate training and experience."

1. The *New England Journal of Medicine*, 240:5 (February 3) 1949. Recent Impressions of Medical Practice in Great Britain. William H. Sweet, M.D., pages 168, 172.

2. According to recent reports in the *British Medical Journal*, it has been impossible to determine salaries because of the mounting costs already outstripping all calculations.

CONSUMMATE GOVERNMENT DERELICTION

At this time when the Executive branch of the government has the people of the United States excited and confused about the question of national Compulsory Health Insurance it seems to be a good time to call attention to the nation's outstanding example of the government's failure in the field of medical care. The importance of this information is magnified by the false claims of the Federal Security Administrator.

Having had approximately 80 years to show what full government control can do in competition with medicine as a free enterprise, the victims of Federal medicine are dying of tuberculosis 10 times as fast as the general population. Please bear in mind the fact that by using the term general population, we refer to those not yet blessed by the gift of Federal Security for which Wagner, Murray, Dingell, Altmeyer, Falk, Ewing and their ilk have long been clamoring for through their extravagant publicity illegally financed at the taxpayers' expense and freighted with sweetened statistics.

This communistic movement now openly supported by the representatives of the Administration is designed to give all the people what the government has given certain Indian tribes, namely, 10 times the chance they now enjoy to die of tuberculosis and almost equal odds in connection with other preventable and curable diseases. We can count on an upsurge in all these conditions now cursing the groups under the so-called blessing of bureaucracy. Many of the people who now receive government medicine are covered with lice, encrusted with the itch, blinded by trachoma and suffering an extremely high mortality because of other diseases and conditions which should have been brought under control long ago.

That medicine, as a private enterprise, controls all these conditions with prompt and intelligent use of modern preventive and curative agents, apparently means nothing to bureaucrats bent on the so-called security which would foist bureaucratic control upon all the deluded people who voted the continuation of the New Deal.

Before Congress is assailed by all the proponents of socialized medicine, all the people misguided by the false claims of propaganda financed by the diversion of the tax-

payors' money should travel to some of these hotbeds of disease and see what has happened under the cocksure prescription to be written, dispensed, and paid for by the people under compulsion.

In case the prescription is authorized by Congress and forced upon the free people of America, the deglutition of the nauseating dose may be facilitated by the fact that all good citizens must hold their own noses because of the stench arising through the corruption of medical science and the decay of society.

Behold the answer.

The New Deal, ignoring the sacred origins and obligations of our democratic government, is now trying to drive a treaty with the free people. The poor Indians had no recourse, "We, the People," still the government, are threatened with a form of serfdom which if put into effect, will silence our voices in government and make bureaucratic medicine the entering wedge toward a totalitarian regime.

Shall the informed people and the physicians continue to rest in a fools paradise or shall they launch an intellectual campaign for the enlightenment of the uninformed who may unwittingly help rob all the people of the privilege of pursuing the plain truth which shall keep us free.

LIKE A GOOSE BUT NOT SO FREE

The wild goose fixed in the cohesive V which carries him south or north in season, has no freedom while in flight. But it is said that when the V descends to about 200 feet above water whether with or without a signal from the dictator, pandemonium arises among the geese and there is a mass rolling and tumbling from a sheer sense of freedom before they glide down upon the cool water.

If we accept bureaucratic control and take our place in the formation, like a goose, we lose our liberty but being a bigger goose than our migratory brothers, there will be no coming down to water, no gleeful rolling in the sheer exhilaration of re-won freedom. Even the wild goose accepts compulsion only for a given flight.

It's not work that gets us down, it's the necessities, the coercions, the compulsions. Shall we give up what little freedom we have left, or shall we form our own dry land V and buck the administration team with hope of winning the fight for freedom.

SCIENTIFIC ARTICLES

SUBTROCHANTERIC FRACTURES OF THE FEMUR*

CHARLES R. ROUNTREE, M.D.

OKLAHOMA CITY, OKLAHOMA

During the past decade much has been said and written about fractures of the neck of the femur and fractures through the region of the trochanters. Great strides have been made in the treatment and management of these cases, and the vastly improved end results certainly speak well for the progress which has been made.

There is however, another type of fracture occurring in the proximal end of the femur which apparently has not merited the recognition it deserves. A subtrochanteric fracture of the femur is one occurring in the upper end of the shaft immediately below the greater trochanter. They are of relatively infrequent occurrence but are becoming more common as the result of the high speed, and may we say, reckless transportation era in which we live.

The nature of the trauma and the forces applied often produce extensive comminution with gross displacement of the fragments. The vast majority of these fractures are simple rather than compound. In order to understand the position the fragments assume and to comprehend the action of forces necessary to effect and maintain reduction, we shall review briefly the anatomy of this area. The strong gluteal muscles (Gluteus medius and minimus), which abduct the hip are attached to the proximal fragment in the region of the greater trochanter. The strong ilipsoas and iliacus muscles are inserted into the lesser trochanter. The strong ilipsoas and iliacus ally rotate, and abduct the proximal fragments.

The adductor muscles are inserted into the shaft of the femur below the fracture. Therefore, in subtrachanteric fractures the proximal fragment assumes a position of abduction, flexion and external rotation.

The distal fragment is pulled upward and inward by the adductor muscles and backward by the hamstrings. Also, the distal fragment is rotated outward due to the pull of gravity and the weight of the extremity. In severely comminuted fractures the fracture line may extend upward and involve the base of the neck and the intertrochanteric area. It is not uncommon to have soft tissue and muscle interposed between the fragments, but we have not observed any serious complication such as nerve injury or blood vessel damage. Delayed union and non-union, however, are not uncommon. The fracture is not common to any age, but is seen in both the young and the old.

TREATMENT

Treatment may be discussed under two headings: First: Closed or conservative, and second, open or operative treatment. Inasmuch as it is necessary to fix the pelvis, as well as the short proximal fragment, in order to maintain reduction and preserve length of the extremity the use of such apparatus as Thomas splint, Braun frame, Russell traction, and Buck's extension is not advocated. The well leg traction splint, designed by Roger Anderson, is indicated in these fractures because of the mechanical principles under which the well leg traction splints operate. The principal is this: When the well leg is adducted, the injured leg is abducted and the pelvis is fixed. In other words, the distal fragment is lined up with the proximal fragment. The objection to the use of this apparatus which we would offer is that the patient is usually not comfortable and the prolonged immobilization of the knee joint leads to stiffness and muscle atrophy which may be difficult, or impossible to overcome.

Reduction and adequate fixation of the fracture in a plaster of Paris spica cast may be accomplished if the fracture is be-

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low the lesser trochanter, and is oblique from the outer side inward and downward. In this position, abduction of the distal fragment will lock the fracture and afford a stable fixation. On the contrary, if the fracture is oblique in the opposite direction, the reduction is unstable because of the pull of the adductor muscles and loss of position is apt to occur.

The most common complication resulting from these injuries is delayed union or malunion with shortening and deformity of the extremity. In those cases where there is a severe flexation deformity of the proximal fragment, it is necessary not only to abduct the distal fragment but to flex it to about 60° as well in order to effect a good reduction. This position must be maintained during the healing process. These fractures are rather slow to unite and seldom, if ever, is good bony union obtained under three to four months' time.

Open reduction, using a type of internal fixation which is adequate to provide firm immobilization of the fragments without any external fixation, seems to be the treatment of choice. In our hands this management uniformly has produced the best results. We have found a Neufeld nail or the Blount blade plate the most satisfactory for this purpose. While we prefer the Vitallium metal if available, there is no objection to any of the inert steels. As a rule, in the more severely comminuted subtrochanteric fractures it is necessary to drive a pin up into the neck of the femur, and transfix it securely to the shaft fragment before adequate immobilization is effected.

If, however, the fracture is confined to the shaft below the less trochanter and does not involve the intertrochanteric area, we can secure good fixation by means of a long plate and screws. It is highly desirable

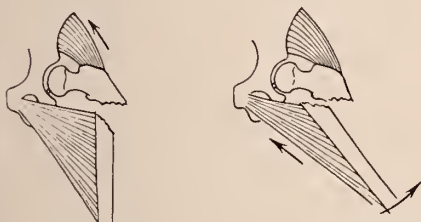


Fig. 1. Taken from Watson-Jones textbook of orthopaedic surgery.

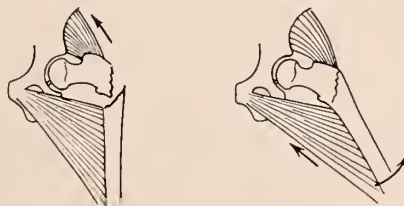


Fig. 2. Taken from Watson-Jones textbook of orthopaedic surgery.



Fig. 3. Taken from Deavers Textbook of Surgical Anatomy.

If a subtrochanteric fracture lies below the lesser trochanter the proximal fragment is flexed by the iliopsoas as well as abducted by the gluteal muscles.



Fig. 4. Comminuted subtrochanteric fracture before reduction.



Fig. 5. Same as Fig. 4 following reduction and plating with a long vitallium plate.

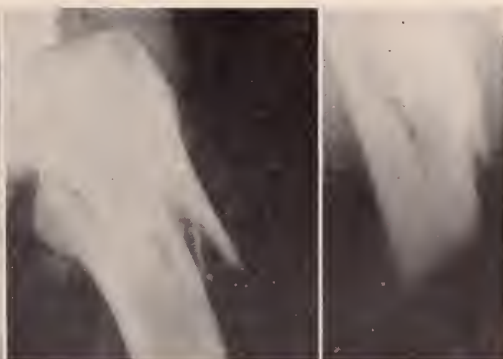


Fig. 6. Fracture before operation.

whenever possible to provide secure internal fixation so that a cast or external fixation can be dispensed with.

Advantages of this include, first, freedom of motion in the joints of the affected

limb upon several factors such as the type of fracture, adequacy of early treatment, patient's bone building powers, his or her health status, age, and presence of complicating injury.



Fig. 7.

Fig. 8.

Fig. 9.

Fig. 7. Un-united sub-trochanteric fracture with broken plate. This was subsequently removed and a bonegraft operation done with an excellent result.

Fig. 8. Following plating with a Neufeld nail.

Fig. 9. Severely comminuted sub-trochanteric fracture.

extremity. Second, institution of early exercises to prevent muscle atrophy and stiffness. Third, promulgation of the circulation of the extremity, preventing venostasis, and last, but not least, the patient can be gotten up much earlier thereby lessening the hospital expense.

In many of the older individuals, the use of crutches in four to six weeks is routinely employed, and in the younger individuals perhaps somewhat earlier. The length of time necessary for union to occur is depen-

As a rule subtrochanteric fractures require from four to six months before the union is strong enough to permit full weight bearing and, in the presence of complicating fracture, the time may be extended considerably. Patient should be checked and x-rayed at stated intervals during convalescence so that the surgeon knows at all times the status of his fracture and the progress he is making toward recovery. The ultimate result of treatment is solid

union, normal length and alignment of the extremity, and a useful range of motion without pain in the affected joint. Such a result can and should be obtained in the majority of the fractures under discussion.



Fig. 11. Same as Fig. 10 showing loss of position due to muscle pull from inadequate fixation.

Fig. 10. Same as Fig. 9 after open reduction with screw fixation.

THE PRINCIPLES UNDERLYING THE MANAGEMENT OF RENAL CALCULI*

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DALLAS, TEXAS

There was a time when the management of renal calculi was a simple, straightforward process. If the renal calculus was seen in the radiographic examination and was considered too large to be passed spontaneously then the problem resolved itself into two simple alternatives — to remove the calculus or to do a nephrectomy. Those days, unfortunately for us but fortunately for the patient, are now past, for the genito-urinary surgeon, like most other surgeons, is now more interested in conservative treatment. This change has been forced on him because so many patients who had had a calculus removed returned with a recurrence or if a nephrectomy had been done for calculous disease, the patient returned with calculi in the remaining kidney. In order to prevent this, urologists have been more and more interested in the etiology and behavior of renal calculi.

Randall was the first to draw attention to the fact that a small calcium plaque on the renal papilla may act as the nidus for the formation of a renal calculus. He was the first to prove beyond a shadow of doubt that calculi actually do grow on these plaques. The etiology of these plaques I discussed in a paper published in the *Journal of Urology*, July 1942, at which time I confirmed Randall's observation that these deposits were present in about 30 percent of individuals.

These deposits must be differentiated from actual calculi which are at times deposited in the collecting tubules of the renal papillae. These are usually referred to as "microliths." Microliths are as a rule bilateral and are present in more than one renal papilla in each kidney and are formed within the lumen of the renal collecting tubule. These may be extruded into the renal pelvis and in time become renal calculi. Unlike these microliths, Randall's plaques which usually are also bilateral and multiple are not visible on radiographic examination. While microliths are true urinary calculi the Randall plaque is not, for as I have

shown, it is formed from the deposition of the calcium in the collagen fibres surrounding the subepithelial blood vessels or tubules of the renal papillae.

The type of calculi which are formed on Randall's plaques varies — presumably with diet and metabolic disturbances. It is a well known fact that different types of calcareous deposits can form one on top of the other. Randall has shown that it is not at all uncommon to have a calcium or ammonium phosphate or carbonate stone deposited upon a calcium oxalate or even a uric acid or calcium urate stone so that it is not hard to see that any type of calculus can form by being deposited from the supersaturated solution in which they are present on one of these "plaques."

There is no one etiological factor for the formation of a renal calculus. We know that stones occur and grow under observation whether the urine is sterile or whether there is a urinary tract infection. We know that stones form when there is no apparent obstruction as well as when there is obvious and definite obstruction. Stones form in the very young and in the aged as well as during middle life. The second World War has taught us that dehydration is an important factor. It was seldom that one saw a German prisoner of war with a renal or ureteral calculus who had not been a member of the "Afrika Korps." The disturbance of calcium metabolism in parathyroid disease may also be an etiological factor.

Patients who have to remain in bed in one position for long periods of time, especially when this is associated with a bony fracture, are likely to form urinary calculi. What the chief etiological factor in this type of case is, is difficult to say. It may be associated with the alkaline ash diet (anti-constipation) that these patients so frequently receive especially in the presence of an increased calcium intake, the disturbance of the normal calcium metabolism associated with the fracture, and the mobilization of

calcium by the administration of Vitamin D. Similar to this is the calculus that forms in paraplegics. Here we also have factors similar to those encountered in a severe fracture which immobilizes the patient such as recumbency and an anti-constipation diet as well as an excessive calcium intake, but instead of mobilization of calcium and Vitamin D. excess they have, as a result of their partially paralyzed bowel such poor elimination that urinary infection with a urea-splitting organism from the large bowel such as either *A. Aerogenes*, *Pseudomonas* or *B. Proetus* is a common occurrence. After that it is just a matter of time before a calculus forms. This is inevitable in the presence of urinary stasis.

If with all this, we take into consideration the extra burden that is placed on our eliminative processes by the habit we have all acquired of taking over doses of citrus fruits and juices and green vegetables to form a good alkaline ash diet and superimpose on this an excessive amount of calcium by drinking "a quart of milk a day," why the 30 per cent of us who have Randall's plaques do not form calcium phosphate or carbonate stones, I do not know.

Our other health habits such as heliotherapy, which like Vitamin D., mobilizes calcium, is also conducive to calculus formation, especially in those of us who have a Vitamin A deficiency. Strangely enough, there is a very high percentage of apparently normally healthy individuals who, by our present methods of examination, are found to be deficient in Vitamin A—not so much by the fact that they lack it in their diet but because they are unable to assimilate and utilize the Vitamin A they take.

With this rather sketchy outline of the more common known etiological factors involved in the formation of renal calculi, the problem of their treatment becomes a rather interesting one.

The problem facing us, therefore, when we see a patient with a renal calculus is what to do, when to do it and how to prevent a recurrence. This requires a serious study of all the underlying predisposing factors which may have been the original cause of the calculus. If these can be brought under control the calculus may be removed — if not, then we must seriously decide whether to leave the stone where it is and treat the patient symptomatically or whether it would be better and more economical to the patient (both as far as his health and

his pocket-book are concerned) to do either a nephrectomy, or a partial nephrectomy with removal of the stone-bearing calyces, rather than to remove a calculus with the almost certain knowledge that it will recur.

There are circumstances which necessitate prompt if not urgent surgical treatment. When these are present, we have to do the best we can, and later face the consequence of having to prevent a recurrence, but, if these circumstances are not present, a careful preoperative study will save many a heartache.

From the above observations we see that in studying a patient with nephrolithiasis, apart from routine information, we want to know about his health habits, we want details of his food habits not excluding his fluid intake, and we need repeated urine examinations. These examinations must be made immediately after the urine is voided. The first glass of urine which contains the urethral washing must be discarded and the second glass specimen examined. The stained, centrifuged sediment of a freshly obtained specimen or urine will give us the morphology of the infecting organism if one is present and a culture will subsequently identify it. *Never* make the mistake of depending on the culture alone, for the culture will give misinformation in over 36 percent of urines examined. Repeated routine pH determinations of every specimen of urine voided whether the urine is definitely and always strongly acid or alkaline or whether it varies — and therefore, for practical purposes may be considered as being neutral. Uric acid, calcium urate, cystine and xanthine calculi develop in an acid urine. Calcium or ammonium carbonate or phosphate calculi form most commonly in an alkaline urine while calcium oxalate stones are generally found in neutral urine. The reaction of the urine may therefore give us some clue as to the nature of the calculus.

Crystals in the urinary sediment give more positive evidence. An estimation of the blood calcium and phosphorous will help to rule out any gross abnormality of calcium metabolism and may make us aware of parathyroid disease. A study of the urinary calcium excretion frequently gives us a lead as to whether an abnormal amount of calcium is being excreted in the urine. The Sulkowitch reagent when mixed with an equal quantity of urine causes a very obvious and easily read precipitate and gives

an excellent idea of the amount of calcium being excreted in the urine.

At times the x-ray may be diagnostic. An alkaline earth stone is, as a general rule, laid down in concentric layers; an oxalate stone shows branching crystals while a uric acid or cystine stone is either translucent or homogeneous in its radiographic appearance. Unfortunately most radiographs taken for pyelographic study do not penetrate the calculus sufficiently to permit a study of its characteristics.

Pyelographic examinations must be made with care and adequate preparation. If an excretory urogram is to be made it should be done with a definite purpose in mind. Meticulous care in preparation of the bowel and great care in regard to preliminary dehydration are important. If this is not done, wrong or insufficient information may be obtained. This study must give us information pertaining to stasis and emptying. It must give information in regard to mobility of the kidney and it may give information regarding an intra- or extra-renal pelvis.

Further information regarding the relative function of the two kidneys can be obtained on cystoscopic examination. The determination of infection in one or both kidneys and more accurate information regarding the architecture of the pelvis and calyces in relation to the calculus and the more accurate evaluation of the existence and amount of stasis can all be obtained only on ureteral catheterization and retrograde pyelography.

If the etiologic factor is not one that can be corrected surgically then we should attempt to control the growth of the calculus before subjecting the patient to operation. If we can do this, then we can remove the calculus, even the staghorn type, with reasonable assurance that it will not recur. But, if with the regulation of diet and fluid balance and the use of various drugs we are unable to prevent a calculus from growing, and there is no mechanical or other etiologic factor present which can be corrected at operation, we must weigh our decision whether to remove the calculus or the stone bearing portion of the kidney or the entire kidney against leaving well enough alone.

If from our studies we realize that there are etiologic factors present which will make the recurrence of a calculus almost certain then we must make every effort to correct these factors *before* removing the

calculus. If we are unable to do this before operation, we must plan to do it at the time of operation or know that we can do it later. Mechanical obstruction or defects can, as a rule, be corrected at operation. If the disease process is limited to one part of the kidney only the diseased portion should be removed. If the entire kidney is involved it should be removed. If it is an infectious process which is being aggravated by the calculus, the calculus should be removed and a tube left in the renal pelvis through either a pyelotomy or preferably a nephrotomy incision. The pyelostomy or nephrostomy must only be done for the purpose of combating infection which could not be accomplished in any other way, or for some other very positive therapeutic measure. It must never be done merely as a routine with no particular object in mind.

There are times when it is not possible to study a case of nephrolithiasis as one would like to. We may not have the facilities available to do blood calcium and phosphorus determinations; we may not even have a bacteriologist to help us, but we can all do a Sulkowitch test, we can all centrifuge a specimen of urine, examine it wet and stain it and we can all do an approximate pH determination, and so we should be able to collect most of the information we need before treating the patient, surgically or otherwise. Renal calculi should not be removed merely because they are present. They should be removed because they cause pain, hematuria or are responsible for some other form of disability. They should be removed if they are considered to be the chief factor in maintaining renal infection, especially if this infection is causing progressive impairment of renal function or in any other way interferes with the patient's health and it is thought that removal of the calculus will protect the kidney against further damage and also improve the individual's well being. If the stone causes no disability or if its removal will result in greater impairment of the patient's health it should be left alone.

Except in an emergency, a cystine calculus should not be removed unless we are able to change the patient's cystine metabolism, which is doubtful, for it will surely recur. But the formation of cystine calculi may at times be controlled by intense alkalization of the urine; uric acid stones by the control of the purines in the diet. Calcium oxalate calculi occur in neutral urine and are so hard that there is little

one can do to control their growth if a mechanical factor is not present.

The alkaline earth stones are more amenable to treatment when not due to the presence of a urea splitting organism in which case they are very difficult to handle and are almost certain to recur. In the absence of a urea splitting organism such as either *A. Aerogenes*, *Pseudomonas* or *B. Proteus* it is worthwhile to try to acidify the patient's urine with one or other of the many urinary acidifying agents preferably sodium acid phosphate or to try Shorr's suggestion of using an aluminum hydroxide gel to reduce the excretion of phosphates to a minimum and supplement this, especially in the male with estrogen. This, he states, increases the elaboration of citric acid in the urine and at the same time decreases the calcium content. Shorr has successfully prevented the recurrence of the alkaline earth stones on this regime. An acid ash diet eliminating milk entirely as well as citrus fruit is useful and necessary as well as a large fluid intake. Vitamin A without Vita-

min D should be given in large doses. Because this type of calculus lends itself in certain circumstances to control by diet and drugs it is one of the most interesting to care for, also it is the one stone most likely to recur if not intelligently handled.

In summary, metabolic disturbances, ureteral narrowings or strictures, hydronephrosis or any other lesion which prevents good drainage as well as certain types of infection predisposes toward the development of renal calculi. The fact that 30 per cent of the white population have or will have one or more of Randall's plaques on the renal papillae which may act as a nidus for the formation of a calculus makes us realize the importance of conservative treatment and the urgent necessity of directing our treatment toward the prevention of a recurrence as much as toward the removal of the first calculus. The appearance of the first calculus is merely a warning of what is in store for the patient.

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Vincent Vermooten, M.D., Dallas, Texas, is the author of "The Principles Underlying the Management of Renal Calculi" in the April Journal. Dr. Vermooten, professor of urology at Southwestern University School of Medicine, was a guest speaker at the 1948 annual meeting.

SEE PAGE 151 FOR ANNUAL MEETING PROGRAM

BENIGN TUMORS OF THE BREAST*

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The subject of benign tumors of the breast, as a group, merits consideration for several reasons. They occur in an organ responsible for the origin of 20 per cent of all carcinomas found in women, hence, correct evaluation, and prompt treatment of all apparently benign tumors, will lead to better results in our attack on carcinoma of the breast. In the last decade, publicity in the lay press, concerning carcinoma, has stimulated patients to present themselves at the onset of lesions in the breast, thus making the diagnostic possibilities more numerous. Even until recent years, many patients have not presented themselves, until tumors of the breast were so large as to make the diagnosis obvious. While the treatment of malignant lesions has become fairly well standardized, the treatment of many benign conditions presents many variations in opinion and practice.

The evaluation of the incidence of benign tumors is difficult, because undoubtedly many women with such, do not seek medical aid, while almost every woman with a malignant tumor consults a physician at some time or another. It is generally thought, that up to the age 40, benign tumors are far more common than malignancy of the breast, and that between the ages of 40 and 49 the incidence of each is almost equal, and after the age of 50 the percentage of benign tumors found, gradually decreases, while the percentage of malignancy rises. In a series of 3,513 breast tumors, Lane and Clayton found 68.8 were malignant and 31.2 per cent were benign. MacCarty reported on 13,168 surgical specimens examined by him from 1906 to 1937 and found that 56.3 were benign and 43.7 per cent were malignant. Boyd states that, of true tumors of the breast, 95 per cent fall into two groups, 15 percent are fibro-adenomas and 80 per cent are carcinomas.

The study of benign tumors of the breast is greatly complicated by the welter of terms used, and apparently all attempts through

the years to simplify the nomenclature, have only served to confuse the subject. The classification of Geshicter is a very practical one. He lists as his first heading under A. mammary dysplasia, a term used for what most of us call chronic cystic mastitis. To illustrate the confusion of nomenclature, its various phases have been called: fibrocystic disease, fibrocystic mastitis, cystic hyperplasia, chronic cystic mastopathia, Reclus' disease, Schimmelbusch's disease, mazo-plasia, cystoplasia, adenofibrosis, and cysto-pherous desquamative hyperplasia. This condition is thought by most authorities to result from abnormalities of ovarian hormones, although Ewing concluded that it is in a way hereditary, the main etiological factor residing in the intrinsic character of the breast itself, influenced more or less by hormonal, nervous, and local conditions.

Under the heading of mammary dysplasia we have: 1. masto-dynia, painful mammary tissue of increased density; 2. adenositis, nodosities from epithelial hyperplasia, with small cysts; 3. cystic disease, one or more cysts of appreciable size resulting from secretory changes.

Under the heading of benign neoplasia we have: 1. benign fibro-adenomata, a structure of fibrous tissue and ducts; 2. benign intracystic papillomas which include papillary invaginations of the larger ducts, intracystic papillomas, and papillary hyperplasia which occurs in adenositis of the breast. Some of the other terms that have been used for this group are adenocytoma, proliferous cyst, villous papilloma, papillary cystadenoma, and intracanalicular cystadenoma.

Under benign non-indigenous tumors we have those involving fat (lipoma, xanthoma fat necrosis), lymphatic vessels (angioma, lymphangioma, lymphoma), muscle (leiomyoma, myoblastoma), skeletal mesenchyme (chondroma, osteoma), and skin appendage (dermoid cyst, sweat gland tumors).

Another entity which is being diagnosed with increasing frequency, plasma cell mastitis, is not included in this classification.

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A summary of some of the most prominent clinical features of the conditions in the classification is as follows:

Mastodynia, while a form of mammary dysplasia, is not characterized by tumor formation although the painful area is usually firmer, thicker, and more granular than the surrounding breast tissue, and there are histologic changes that are typical. It is common in women 20 to 40 years of age, and occurs three times more often in married women than in single ones. It is characterized by pain, which is gradual in onset, and referred to a portion of the breast, usually the upper outer one-third. It may be unilateral or bilateral.

Adenosis, or Schimmelbusch's disease is most frequently seen in women between 35 and 44 years of age. In one or both breasts multiple nodules appear which measure 1 mm. to 1 cm. in diameter, and are usually distributed around the upper outer hemisphere. In one-third of the patients pain is a conspicuous feature. A definite edge can often be palpated at the periphery of the diseased portion of the breast. This induration may at times suggest carcinoma.

Cystic disease is found more often in women at or near the menopause, usually between the ages of 41 and 45. It predominates in childless women in a ratio of three to two. Geshicter and others have found evidence to support the probability that an intense or unopposed estrogenic stimulus results in the formation of cysts. The symptoms of cystic disease usually appear abruptly, and are of relatively short duration, the period being in terms of days and weeks. The chief complaint is the discovery of a lump. The cysts are usually found away from the periphery of the breast. The upper hemisphere is more frequently affected. The cysts may change in size, and tend to disappear in seven per cent of the cases. Multiple cysts are found in both breasts in 25 per cent of cases at the first examination. A thick fibrous walled cyst deep in the breast makes diagnosis difficult. The relationship between cystic disease and cancer is not clear cut, but it has been shown statistically that the condition is associated with a definitely greater likelihood of developing cancer, but the risk is not enough to require routine radical prophylactic measures.

Fibroadenomata are the most common benign tumors of young women in the child-bearing age. They are firm, encapsulated, freely movable tumors, and are usually soli-

tary but may be multiple. In fibroadenomata occurring near the menopause, giant myxoma or fibrosarcoma may develop growing slowly for five or six years then growing very rapidly. Fibroadenomata have been produced experimentally in the rat and monkey, by stimulating the breasts with high intensive doses of estrogenic hormones.

Benign intracystic papilloma, with the exception of the papillary hyperplasia with adenosis, is seen most frequently in women at or just beyond the menopause. Bloody discharge is a frequent symptom and a palpable tumor may or may not be present.

Benign intracystic papilloma, with the breast present the same characteristics as those found in other parts of the body.

Plasma cell mastitis, first described by Ewing, is now considered a definite entity being a periductal mastitis arising in association with dilated ducts beneath the nipple. There is redness, tenderness, and induration in the region of the nipple which fans out over a small sector or triangle. One of the diagnostic features is the presence of one or more tense cords or bands traversing the inflamed area, which are dilated ducts. The process resolves slowly. Because of the induration and edema of the skin and retraction of the nipple, together with palpable lymph nodes, a diagnosis of carcinoma is frequently made.

In the diagnosis of benign tumors of the breast there is still no easy substitute for a careful history and examination evaluated by the use of good clinical judgment. Although clinical diagnosis can achieve a fair degree of accuracy in most cases, the old aphorism, that all tumors of the breast are malignant until proved otherwise, still holds and the final judgment rests with the pathologist. There are several aids to diagnosis which should be considered as aids only, and not a substitute for a complete examination. One is transillumination, which is very helpful in examining pendulous breasts, but is unsuitable for small flat breasts, and also any lesion in the upper half of the breast. Roentgenograms have been used in the diagnosis of breast tumors but have little to offer. Several years ago many were enthusiastic about the injection of the larger ducts with contrast media, for the diagnosis of intraductal tumors, but this technique has fallen into disuse because it rarely added any information, it was difficult to do, and frequently caused a serious mastitis. The examination of secretions from the nipple

microscopically will determine definitely the character of the secretion, especially the definite presence of blood. Recently with the introduction of the Papanicolou technique experts in its interpretation have made great strides in the diagnosis of malignancy from breast secretions.

The ideal treatment for any benign tumor of the breast is surgical excision of the tumor with a margin of surrounding breast tissue, and immediate microscopic examination by a pathologist, with preparations made for any type of radical procedure deemed necessary by the nature of the tumor. In larger tumors, where the removal would cause a marked deformity (Geshicter gives an arbitrary lower limit of 3.5 cms. in diameter), a biopsy of the tumor should be made before any radical procedure is performed. Many physicians oppose biopsies on the ground that incision into a malignant tumor will cause it to spread through veins and lymphatics that are opened up. Bell says that theoretically this objection appears sound, but it is merely supported by opinions and prejudices and not by statistical data, and that such facts as we have indicate that biopsies are not dangerous especially if immediate further treatment is considered. The diagnostic uterine curettage has been practiced for years and is not considered dangerous.

In a recent article, Slaughter and Peterson at the University of Illinois, have evaluated the operation of simple mastectomy, and deplore the fact that it is often done blindly and needlessly.

They think that Bloodgood's succinct remark, that simple mastectomy is too radical for benign lesions and inadequate for malignant ones, is right in principle but too dogmatic to condemn the operation. It is pointed out that definite indications for the operation should be considered and these are divided into therapeutic and prophylactic indications. Only two reasons are given for prophylactic mastectomy, one is multiple or diffuse, and recurrent benign tumors with malignant potentials, such as multiple intracystic papillomas. The second indication is chronic cystic mastitis, or mammary dysplasia, showing diffuse duct changes of advanced epithelial hyperplasia, as determined by biopsy. The authors also point out that most simple mastectomies are only partial mastectomies since the breast parenchyma extends more widely than is generally appreciated. Hicken has shown by x-ray studies that in 95 per cent of all mammary

glands studied, ducts ascended into the axilla, and in 15 percent they extended into the epigastric space. Some were frequently in intimate contact with skin, or passed through the pectoralis major muscle, and some were found posterior to the latissimus dorsi muscle. This indicates the difficulty involved in removing all mammary tissue, and mammary tumors have recurred after simple mastectomy.

The greatest variation in forms of treatment of any one condition of the breast is found in the management of the bleeding nipple. This varies from watching indefinitely, to immediate radical surgery. Some light is shed on this problem by a recent report by Gray and Wood in their study of 227 cases of papilloma. Of this number, 52 per cent were found to be benign, and 48 per cent malignant. Eighty per cent of these patients had a serous, serosanguinous, or sanguinous discharge from the nipple. The average age of patients with benign lesions was 46, the youngest being 19 and the oldest 78. In the series of malignant tumors the average age was 47, the youngest being 19 and the oldest 87. The significant feature of the study was that of the malignant papillomata accompanied by discharge, only 40 per cent presented a palpable tumor, while 60 per cent showed no evidence of tumor. This is in variance with some of the previous teachings that sanguinous discharge without a tumor was considered a benign condition. The authors urge that such discharge be given more serious consideration and that in most instances surgical intervention be advised.

Surgical treatment of these tumors may be local or consist of a mastectomy. If a tumor mass is palpable it is advisable to excise it locally through an incision placed at the border of the areola. At the same time any other dilated ducts should be explored for other tumors. Needless to say a pathological examination of the tissue removed is necessary. If no tumor is felt, the duct from which the discharge appears may be identified and explored. Babcock recommends the use of a small probe threaded in to the duct as a guide. A considerable area of the breast may be explored in this manner, if no tumor is found, mastectomy is to be considered. Removal of the central portion of the breast is usually not done in women of the child bearing age.

Endocrine therapy in the treatment of benign conditions of the female breast should be predicated on a positive diagno-

sis of the process. It is most useful in mastodynia, and has had some success in the treatment of adenosis and cystic disease. Any estrogenic substance used should be given in small doses and never for a long period of time. Progesterone seems to have given the most satisfactory results.

Aspiration of cysts has been used both for diagnosis and treatment, especially in cystic disease of the breast. Geshicter has found that one-third of these are cured with a single aspiration. If dark brown or bloody fluid is aspirated, surgical removal is indi-

cated. The fluid of a non-malignant cyst is straw colored and may be slightly cloudy. All such fluid removed should be examined microscopically.

Irradiation in the treatment of benign conditions of the breast has rarely been found to be satisfactory.

In conclusion, I would like to point out that our objective in the treatment of benign tumors of the breast, is to save the patient from the removal of excess tissue, and yet give her the greatest margin of safety from carcinoma.

DISEASE OF THE SCROTAL CONTENTS*

DONALD W. BRANHAM, M.D.

OKLAHOMA CITY, OKLAHOMA

It is probably on a fundamental biologic basis that the average male seems more concerned with his genital structures than of other portions of his body. Many men appear to tolerate, with better grace and patience, pathologic states or anatomical abnormalities of the face or extremities than with disorders afflicting the genitalia. Witness for example, how long most individuals bear with relative equanimity chronic inflammatory conditions of the nose and throat as in comparison with benign infections of the prostate or urethra.

This is an important psychologic fact to the physician in his treatment of disease involving the external genitalia. In many instances the emotional symptoms of impotency and loss of libido accompany organic disturbances of these structures. In such individuals who may be emotionally susceptible to sexual aberrations, the physician's careless comment or advice may possibly induce or aggravate such sexual disturbances. For this reason the specialty of urology has been a fertile field for the quack or medical exploiter.

Varicocele is a condition that is fairly common in younger individuals. It is well known to be a disorder that in some patients is productive of much more distress and disability than in others. Undoubtedly the patient's emotional temperment contributes to a degree the amount of disability

complained from varicocele. Because of this the operative results obtained in the surgical treatment of varicocele have been extremely variable. Experienced urologists have found the indication for surgery must be definite and carefully evaluated for each patient to obtain the best operative results. Because psychiatric disturbances may complicate the clinical picture of varicocele, complaints of fatigue, nervousness, backache, loss of libido or impotency are suspect symptoms of emotional instability. Varicocele in most instances is not productive of much disability unless the scrotal enlargement is of such proportion as to mechanically, from the weight induced, produce tension on the cord structures. In such large tumefactions, operation is definitely indicated and will be followed by satisfactory results. A practical therapeutic test is how much relief from discomfort is obtained from a well fitting scrotal suspensory. When it has been found that rest and scrotal support gives no relief one can be reasonably assured that varicocele surgery will be of little avail and may even make the patient symptomatically worse. Such patients should be reassured as to the seriousness of their condition and an attempt made to correct their emotional dysfunction.

Acute nonspecific epididymitis is an extremely common disease. The majority of acutely inflamed epididymi will respond therapeutically to bed rest, scrotal support

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association May 19, 1948.

and antibiotic therapy. In a rare instance surgical drainage may be indicated. Occasionally as a late sequella, painful indurations in the tail of the epididymis persist after prolonged or recurrent inflammatory episodes. In these, pain and hyperthesia may be so pronounced as to produce considerable disability. One may diagnose these lesions by careful palpation of the epididymis and discovering such painful indurations often exquisitely sensitive to even light palpation. As the epididymal tubules are usually sclerosed by the inflammatory contracture the production of unilateral sterility by surgery is not a deterring factor in advising complete epididymectomy as the most satisfactory treatment.

Malignancy of the testicle is relatively uncommon but is always a diagnostic consideration when scrotal pain or swelling is complained of. The average testicle, on palpation, has a resilient smooth homogenous consistency. Carcinoma manifests usually as localized indurations in the body of the testicle itself. When such changes in the consistency of the testicular parenchyma are noted, operative exploration is indicated at the earliest. It must be remembered that the testicle is singularly immune to inflammatory lesions and such physical findings should not be casually dismissed as of benign inflammatory origin. Carcinoma of the testicle is a serious disease because of early metastasis so that a high index of suspicion should be attached to such testicular abnormalities.

Hydroceles and spermatoceles are commonly encountered, the former more often than the latter. In my opinion, both are better treated by open surgery than repeated aspirations or the injection of sclerosing agents. I realize many are reporting excellent results with sclerosing methods, but in my experience it has been an unpredictable therapeutic procedure. If too dilute solutions are used multiple injections must be performed and if the sclerosing medication is too concentrated severe local reactions occur. In a few patients who have had recent sclerosing treatment and on whom I have performed hydrocele operations I have been impressed with the intense inflammatory reaction involving the tunica vaginalis and tunica albuginea. One speculates that possibly late sequella of testicular atrophy may not occur in a few instances where intense periorchial inflammation is produced from sclerosing therapy.

Postoperative bleeding within the scrotal sac, following surgery of the testicle and epididymis, occurs not infrequently despite the most meticulous hemostatic technique. Lately in order to prevent this complication I have been placing several pledgets of gelfoam in the scrotal sac before replacing the testicle and closure of the scrotal incision.

The scrotum is then dressed with a firm elastoplast dressing to provide complete immobilization and scrotal compression. The postoperative results have been extremely satisfactory. Scrotal swelling has been minimal and wounds have healed well.

TWENTY-FIVE YEARS AGO

Dr. J. M. Byrum, Shawnee, recently attended the clinics at Chicago.

Dr. W. N. Davidson, Cushing, has recently taken the examination for a commission in the medical Officers Reserve Corps.

Dr. T. H. McCarley, McAlester, recently attended the meeting of the American Congress of International Medicine at St. Louis.

Dr. R. E. Sawyer, Durant, and family have returned

from a several weeks' vacation trip to San Antonio, Hot Springs and other points.

The State Medical Meeting was announced in the April, 1924, Journal as scheduled for May 13, 14, and 15 in Oklahoma City. Committees were: General Chairman, Dr. W. H. Miles; Clinics, Dr. Wann Langston, Chairman; Committee on Meeting Places, Dr. E. P. Allen, Chairman; Committee on Registration, Badges, Information, and Reservations, Dr. Carroll M. Pounders, Chairman; Committee on Finances, Dr. W. W. Wells, Chairman; Committee on Entertainment, Dr. S. E. Frierson, Chairman.

CEREBRAL PALSY*

O. R. GREGG, M.D.

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Cerebral palsy is an interference of normal motion due to injury, disease or anomaly of the motor centers in the brain. If the injury is in the motor area situated in the cortex of the cerebrum, in front of the fissure of Rolando, we have what is known as spastic paralysis. In spastics, the affected muscle or muscles are hypertensive to stimuli. Spastic muscles contract when squeezed or attempt is made to stretch them. This is known as the stretch reflex and is a characteristic symptom of spastics. Loud noises and sudden motions cause hypercontractions. Because of the hypercontraction of the spastic child's muscles, he falls a lot, and because the muscles are in a spastic condition, it hurts him when he falls. Consequently the spastic child is fearful. He has been hurt so much, he is in constant fear of falling. He is afraid of loud noises. He is afraid of new people and strange places. He is in a constant tension and burns a lot of calories.

As previously stated, injury causing spastic paralysis is situated in an area in front of the fissure of Rolando, known as the pre-cortical area, the pyramidal area, and also known as area six. This area is adjacent of the frontal lobe area, where thinking is done. Frequently the injury that caused the paralysis extends into the mental area of the frontal lobe causing mental disturbances. Consequently quite a number of spastics are mental defects.

Reflex motor impulses arise from the cortex of the cerebrum, also from the cerebellum and pass through the basal ganglia that lie on the floor of the lateral ventricles. It is the duty of these basal ganglia to block our unwanted reflexes. When these ganglia fail to function, a host of unwanted reflexes get by and a child reaching for a pencil will frequently protrude his tongue, squint his eyes, and move

his feet, all involuntarily. This condition is the second classification of cerebral palsy and is known as athetosis.

Athetosis comprises about 45 per cent of the cerebral palsies. The athetoid child is in constant motion when awake, (not when asleep). He is the wiggler. He has a superabundance of reflexes. He is not afraid of falling; his many reflexes take care of that and if he does fall, he is so relaxed that it hurts him very little. This child has no fears and seldom gets hurt. He likes people and thrives on love and affection. Company helps him relax which is his major problem.

If the injury is in the cerebellum, we have a lack of coordination; a loss of balance power. This third type is called ataxia and comprises only a very small per cent of the cerebral palsies. They develop fear as do normal babies. Their fear is a fear of balance rather than muscle control. They generally are not very affectionate and do not want to be moved. They much prefer to lie in bed rather than to move and disturb their equilibrium. Rocking makes them seasick.

The fourth and fifth classifications of cerebral palsy are known as rigidities and tremors. They comprise a very small percent.

In rigidities the affected muscle or set of muscles are perfectly rigid and do not relax. Rigidities are due to diffuse lesions in the brain caused by encephalitis. The injuries are generally so extensive that the learning centers are involved and we have a mental as well as a motor problem.

Tremors are caused by disease, injury or anomaly of the basal ganglia and are manifested by involuntary contractions, which are reciprocal in nature and regular in rhythm. In intention tremors, the involuntary contractions are present only when movement is attempted, while in non intention tremors, the motions are present at all times. Tremors are seldom seen in children.

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

Causes of cerebral palsy are classified as prenatal, natal and postnatal.

Just why there is a distortion or absence in brain development in certain pregnancies, is not known any more than why the faulty development that causes harelip or spinafida, but we do know that they occur. Autopsies on spastics and athetoids frequently have proven maldevelopment.

Exenthemata diseases of the mother during pregnancy, particularly German measles, predisposes cerebral palsy. Some of the authors go so far as to advise termination, if the mother has had rubella during the pregnancy, in order to prevent an almost certain defective child. Syphilis and vitamin deficiency during pregnancy cause a small number, and excessive use of alcohol is to blame for a larger percent.

NATAL CAUSES

Birth injuries are only credited with seven per cent by Ford. Dr. Phelps and Temple Fay think this is entirely too conservative. Dr. Robert Knight has noted in mild spastics, where only the lower limbs were involved, the high frequency of histories of twins, prematures or other sudden and almost painless births. He is of the opinion that the sudden change of pressure from the inside of the uterus to the external world caused minute hemorrhages under the fontanelles.

Traction on the neck during the delivery of a shoulder or after coming head in a breach presentation can tear the tentorium and rupture the vein of Galan. This is undoubtedly responsible for some athetoids and for numerous deaths of infants who would have been athetoids had they lived.

A cord wrapped tightly around the neck and the excessive use of painless birth drugs both cause a lack of oxygen to the brain. Brain tissue is the first to deteriorate for lack of oxygen or any other reason.

Excessive high temperature may cause deterioration of brain tissue. Convulsions from any cause and pertussis paroxysms are frequent causes of C.P.'s. Head injuries are responsible for a few. I have already mentioned cerebral palsy as being an end result of encephalitis.

Lastly, but not least, dominance is a cause of cerebral palsy. Perhaps I should say can be a cause.

When taking on a cerebral palsy program, the first question asked by your spon-

soring group, if you have one, and I certainly advise such a group, will be, "How long does it take to cure cerebral palsy?" The first question asked by the mother will be, "How long will it take to cure my child?" I think that it is best to tell them right at the start that cerebral palsy is not cured. This is a salvage job. There has been damage done to some part of the brain and we cannot repair brain tissue but we can salvage what we have left. The less the damage, the better is the salvage.

This is done by retraining muscles and groups of muscles; establishing new habits; giving assistance with braces and other artificial means and above all things else, teaching relaxation.

In considering our salvage results, we should consider the incidence of cerebral palsy. Quoting Dr. Phelps, there are seven C. P.'s born or made each year to 100,000 population. Of these seven, one will die at birth or shortly after.

Of the six remaining two will be so mentally handicapped that there is no hope of salvage. These are known as helpless, hopeless and there is no future but institutional life. Of the four remaining, one is so severely handicapped that there is no hope to approach anywhere near the normal, but if this child can only be helped to the place where it can make its body wants known, by signs or other methods, it is a great help to the mother and those who care for it. One child is so mildly handicapped that it is scarcely noticeable or so mild that with a very little training he passes as a normal person. Two of the original seven by proper training can be salvaged to the place where they can make their own living but without training would remain in the helpless group.

I would remind obstetricians that undue traction on the after coming head, precipitated delivery, and indiscriminate use of pain relieving drugs frequently cause cerebral palsy. Rubella contracted during pregnancy, more times than not, will cause malformations, including cerebral palsy. Bear in mind that any convulsion of childhood may cause hemorrhage in the brain and resulting cerebral palsy. Lastly, bear in mind that one-third of cerebral palsy can be salvaged to where they can make their own living and that another third can be helped by treatment.

CLINICAL PATHOLOGIC CONFERENCE

*Presented by the Department of Pathology and the
Department of Medicine
The University of Oklahoma School of Medicine*

BÉLA HALPERT, M.D. AND ROBERT C. LOWE, M.D.
OKLAHOMA CITY, OKLAHOMA

DOCTOR HALPERT: Under ordinary conditions the number and variety of the cells present in the peripheral blood reflect fairly accurately the functional state of the bone marrow. Occasionally, profound changes may be present in the marrow which are not immediately reflected in the peripheral blood. At times, extramedullary hemopoiesis may contribute to the cellular content of the peripheral blood. The permanent increase of any one type of cell constitutes the corresponding type of leukemia. The naming of the leukemia becomes difficult when the cell type permanently increased is so immature that it is not easily recognized. In such a case the nomenclature will depend to a considerable extent upon one's concept of the origin of the cellular components of the blood. The case for discussion today illustrates this problem. Dr. Lowe will analyze the clinical data.

CLINICAL DATA

Patient: N. B. W., white male, age 42 years. Admitted November 13, died December 8, 1947.

Chief Complaint: Chills, fever, and weakness.

Present Illness: The patient was in good health until September 15, 1947, when he noticed weakness and general malaise. His physician gave him a course of quinine followed by a course of atabrine, after which the patient had shaking chills and sweats, most marked at night. Weakness and malaise continued, but he was able to do his farm work during October. On November 5 he had a chill and fainted on the street. He was taken to a clinic in McAlester and given a blood transfusion for anemia, then brought to this hospital. There was no mention of bleeding from any source, and no marked weight loss.

Past History: He had malaria at about the age of five years.

Family History: Five siblings are alive and well, also his wife. Mother, age 90, is in poor health. Father died of a stroke.

Physical Examination: At the time of admission he was fairly well developed, well nourished, pale, and appeared chronically ill. The temperature was 98.8° F., pulse rate 72 and respiratory rate 20. Blood pressure was 108/50. Pupils were equal and irregular. The fundi were normal, except for two hemorrhages in the right, and one hemorrhage in the left retina. There were several ulcerated areas on both sides of the nasal septum and petechial hemorrhages on the left side of the soft palate. The chest was clear to auscultation and percussion. Ribs and sternum were tender to pressure. The heart was slightly enlarged and there was a soft, systolic murmur at the apex, not transmitted. The abdomen was flat and non-tender. The spleen was palpable two to four fingers breadths below the left costal margin. There were soft, fairly large lymph nodes in the left axilla and small, firm lymph nodes in the cervical and inguinal regions. Reflexes and sensations were as usual.

Laboratory Data: On November 13, 1947, the Mazzini test of the blood was negative. The red blood cell count was 2,380,000 with hemoglobin 6.5 Gm.; the white blood cell count was 37,850 with neutrophils 18 (juveniles 5, stabs 5), blasts 21, promyelocytes 14, lymphocytes 36, and monocytes 9, per cent. On November 14 the coagulation time of the blood was 2 minutes 30 seconds, and the bleeding time 9 minutes 30 seconds. On November 17 the urine was yellow, clear, and had a pH of 6 and a specific gravity of 1.024. There was no albumin and no glucose. An occasional white blood cell per h.p.f. was seen. On November 21 the red blood cell count was 2,500,000 with hemoglobin 8 Gm.; the white blood cell count was 4,100 with blasts 23 (undifferentiated 18,

myeloblasts 2, and monoblasts 3), reticulo-endothelial cells 10, promyelocytes 12, monocytes 12, myelocytes 7, stabs 3, segmented 10, and lymphocytes 22, per cent. The peripheral blood had essentially the same distribution of cells on November 24, 25, and 26. On November 28 the red blood cell count was 2,440,000 with hemoglobin 6.75 Gm.; the white blood cell count was 16,100 with neutrophils 7, blast forms 60, reticulo-endothelial cells 14, lymphocytes 13, monocytes 2, promonocytes 4, per cent. The blood findings remained about the same on November 29, December 1, 4, and 6. On December 10 examination of the bone marrow revealed hyperplasia with undifferentiated blast forms predominating. The organism *Plasmodium vivax* was found in the peripheral blood on several occasions.

Clinical Course: Petechial hemorrhages were noted over the lower extremities on November 15. The Rumpel-Leede phenomenon was present. The course was irregularly febrile, temperature varying from normal to 104° F. The hemorrhagic phenomena increased, including epistaxis, bleeding from gums, ecchymoses, and petechiae of the mucous membranes and skin. The spleen became somewhat larger. The ribs and sternum became progressively more tender and painful. The patient began to have pain in the left lower chest and severe pain in the right upper quadrant. Moist rales, expectoration and difficulty in breathing developed. He was treated supportively with sedatives, analgesics, and intravenous plasma and blood. On November 21 a left axillary lymph node was removed for microscopic examination. The diagnosis returned was: lymphnodulitis, chronic, nonspecific, with focal areas of hemorrhage. On November 22 a course of atabrine and quinine was given. The patient's condition gradually became worse and he died at 11:05 a.m. on December 8, 1947.

CLINICAL DISCUSSION

DOCTOR LOWE: It is obvious that the clinical course in this patient was short, culminating in death after a total duration of approximately two and one-half months. The findings of weakness, fever, general malaise, hemorrhagic phenomena and enlargement of the spleen are all suggestive of a disease involving the hemopoietic system. In fact, any one of these alone should direct attention to this system. Doctor Halpert has already remarked on the fact that the changes in the peripheral blood may or may not reflect disease of the bone marrow.

We should, however, turn our attention first to a careful perusal of the peripheral blood in conditions of this sort. In addition to determining which particular series of cell elements the disturbance may involve, that is, lymphocytic, myelocytic or monocytic, we wish to determine any qualitative changes in these blood cells; that is, whether or not there is a shift to immaturity, and if so, the degree of the shift. Actually, the presence and the degree of immaturity of these cells of the peripheral blood may be determinative factors in our diagnosis and in our ideas as to what is going on in the bone marrow and other organs which may take part in hemopoiesis. What particular series of cells is involved in the process can be considered of secondary importance, so far as the patient is concerned. We are primarily interested in determining the essential nature of the disease and do not consider it important that we decide on lymphocytic versus a myelocytic involvement. It is obvious from studying this patient's peripheral blood that there was a marked increase in the number and in the degree of immaturity of the cells. This evidence justifies the diagnosis of leukemia without particular reference to the type of leukemia. We can go further and say that this is an acute leukemia. When we say this we accept the fact that certain acute leukemias are characterized by cells which are so immature in their state of development that we can go no further than to say that the picture is that of acute or perhaps we might say stem cell or blast cell leukemia. One bit of information that I wish we had to consider is the thrombocyte count. Ordinarily in acute leukemia there is a decrease in the number of platelets. The qualitative aspects of the blood count are compatible and actually confirmatory of our impression of acute leukemia. Oft times we see much higher white cell counts than this, but that is not necessary, and counts of these proportions are by no means uncommon. I believe that the relatively low white count of 4,100, observed on November 21, might have been the effect of treatment with urethane. The patient was treated in this manner, and it was thought that the leukopenia was a favorable reaction to this drug. One further point in the peripheral blood that deserves comment is the presence of reticulo-endothelial cells. This is quite unusual. To my knowledge there are two conditions in which these cells are sometimes found. One is subacute bacterial endocarditis and the other is malaria.

Whether they are involved in this leukemic process or not, I do not know. Perhaps they represent a reaction to malaria which this patient unquestionably had, since the malarial organisms were demonstrable in the peripheral blood on several occasions. We may consider the possibility of subacute bacterial endocarditis. Actually there is nothing here that would stand against that impression: enlarged spleen, hemorrhagic tendencies, malaise, chills and fever, etc., including anemia, except for the qualitative changes in the white blood cells themselves. The findings in the peripheral blood, and especially in the bone marrow, are not compatible with such a diagnosis and if we accept these findings including a predominance of blast forms as a critical feature, I believe we must eliminate subacute bacterial endocarditis as the major disease. My final diagnosis is — acute leukemia, and on the basis of the information at hand, I do not believe I can specify as to whether this is lymphocytic or myelocytic. The immediate cause of death was probably a terminal broncopneumonia.

QUESTION: What significance would you attach to the pulse pressure of 58?

DOCTOR LOWE: I believe it is dependent, in part at least, on the anemia which this patient had, and the consequent decrease in viscosity of the blood. This allows for the drop in diastolic blood pressure which was exhibited and a consequent slight increase in pulse pressure. It is also known that the metabolic rate is increased in leukemias, which, plus the synergistic effects of fever will also increase the pulse pressure.

NECROPSY FINDINGS

DOCTOR HALPERT: At necropsy there was slight icterus. Petechial hemorrhages were distributed as noted during life. The peritoneal cavity contained no excess fluid. The liver extended 12 cm. below the costal margin in the right midclavicular line. This was not due to hepatic enlargement, but was the result of 2,500 cc. of blood tinged fluid in the right pleural cavity that caused descent of the diaphragm. The surfaces of the pleura were covered by a shaggy fibrinous exudate. The left pleural cavity had a similar appearance and contained 1500 cc. of fluid. There was no increased fluid in the pericardial cavity. The spleen was enlarged uniformly in all dimensions and weighed 350 Gm., approximately twice normal. The mesenteric lymph nodes were diffusely enlarged up to twice their usual size. They were soft, fleshy, and appeared diffusely involved in a

process obliterating the usual pattern of the cut surfaces. Abdominal viscera, other than the spleen, were not remarkable. Both lungs were moderately increased in weight and were rubbery. Microscopic studies revealed a leukemic infiltration of the retroperitoneal and mediastinal lymph nodes, myocardium, spleen, liver, kidneys, urinary bladder, lungs and pleural surfaces. The infiltrating cells were immature so that their character could not be ascertained. As Doctor Lowe pointed out, when cells of the hemopoietic system reproduce themselves in neoplastic fashion at an undifferentiated level, it becomes impossible to determine the exact nature of the ancestor cells. In such a case the term of either blast cell or stem cell is used. Evidence in favor of myelogenous origin may be the facts that the bone marrow was diffusely involved and that the involvement of the lymph nodes was slight. Often the distribution of leukemic cells in the liver helps in resolving the question of the cellular origin. Characteristically, in lymphocytic leukemia the distribution of the cellular infiltration follows the portal areas; whereas, in myelocytic leukemia the cellular infiltration is apt to be diffuse throughout the lobules. In this case the involvement of the liver was slight and not characteristic of either type so we gained no help on this score. The fact that this patient had malaria obscures the problem somewhat. Malaria affects primarily the cells of the reticulo-endothelial system, causing their increase in number. The spleen was only moderately enlarged, about two times. What part the malaria may have had in this is hard to evaluate. Microscopic preparations revealed considerable hemosiderin in large mononuclear cells, evidence of erythrocyte breakdown, so that at least some of the changes were probably on the basis of malaria. The architectural pattern of the spleen was fairly well preserved, although there was present some leukemic infiltration. Examination of the lymph nodes, was of more help in establishing the diagnosis. In several of the lymph nodes there was invasion of the capsule of the node by undifferentiated white blood cells which passed through the capsule and were also in the surrounding adipose tissue. This may be regarded as evidence of neoplasia. A small nodule was found in the urinary bladder close to one of the ureteral orifices. Microscopic examination revealed that this was neoplastic. The mucosa of the urinary bladder was intact, but thinned, and underlying this separating

the coarse muscle bundles were cells that resembled blast cells. Our conclusion was that the patient had a leukemia which might be classified as blast cell type. In the tissues and capillaries alongside the undifferentiated cells, there were many nearly mature cells of the myelocytic series. Therefore, judging by the company which these undifferentiated cells keep, I believe the leu-

kemia was myelocytic. Our final anatomic diagnosis was therefore:

Leukemia, blast cell, probably myelocytic, involving retroperitoneal and mediastinal lymph nodes, heart, spleen, liver, kidneys, urinary bladder, lungs and pleural surfaces

Pleuritis, with hemohydrothorax, bilateral Icterus, moderate (atabrine effect?).

Special Article

REPORT OF ONE HUNDRED CLINICS HELD BY THE MOBILE DETECTION UNIT OF THE AMERICAN CANCER SOCIETY, OKLAHOMA DIVISION

J. R. B. BRANCH, M.D.

EXECUTIVE DIRECTOR

OKLAHOMA CITY, OKLAHOMA

This is a report of the work done by the Mobile Detection Unit in the three years from February, 1946, through December, 1948.

It includes data as to the number of clinics held and the number of patients examined. Not overburdened with statistics, it shows how many positive cancer cases and how many suspicious cases were found. The total cost of equipment and operation, with the cost per patient, is also shown. The worthwhileness of the clinic is demonstrated from (a) our own experience and (b) from replies received from doctors throughout the state.

Oklahoma, as well as our Division of the American Cancer Society, has good reason to be proud of the distinction of having the first Mobile Detection Unit in the country; at present there is only one other — in Kentucky. We have just passed the Century mark; the hundredth clinic was held in Ponca City December 10, 1948. We have gone a long way since the first one held in Tonkawa February 14, 1946, where 22 patients were examined and seven positive cases detected; in Ponca City we saw 108 — seven positive and eight suspicious.

EQUIPMENT: A converted school bus costing around \$3,000; materials costing around \$2,000, including equipment for assembling four complete examination rooms with examining tables, diagnostic lights, sterilizers, dressing screens, sheets, pillow cases, patients and doctors gowns, rubber gloves, instruments, etc., donated by the Oklahoma State Federation of Women's Clubs. It does not include an x-ray outfit, nor is it prepared to remove specimens for biopsy. These are used to equip a place such as a church, hospital, or health center, if necessary, where adequate space can be secured for registration, waiting room and examining patients.

PERSONNEL: This consists of a registered nurse, driver, and a non-medical staff worker, who are paid. The voluntary staff consists of registrars usually recruited from the Field Army and a medical staff: a dermatologist, an internist, a gynecologist and a surgeon. It is frequently necessary for these specialists to cover two fields — surgery and gynecology.

OPERATION: The clinic only goes to an area at the request and with the cooperation of the County or Regional Medical Society. Preliminary arrangements for adequate space, voluntary staff and advertising are made well in advance to assure publicity and smooth working.

It seems worthwhile to review the work done during these three years and so far as possible assess the value of it.

Clinics have been held in 72 out of our 77 counties and our influence has extended into the remaining contiguous ones. Some have been visited twice, and we regret that we have not been able to visit all counties and to go to others more frequently.

Altogether, 6,041 people have been examined; of these, 1,107 were found to have cancer, and 979 were suspicious. These diagnoses were made from clinical findings, though many were confirmed by microscopic and x-ray examinations. We have no way of knowing exactly how many of the positive and suspicious cases followed the advice given by the clinic staff, though the estimates of the doctors through the state returning questionnaires sent out, indicate the percentage to be high. There is no question of the fact that the clinics have brought a large number of patients who had not attended to their private doctors for examination.

Several specialists have told us that since the clinics started the number of early or earlier cases has markedly increased. This, however, may indicate a general

trend, or be the result of the active program of public education concerning cancer.

What do the doctors who have been exposed to the clinic think about it? In reply to a questionnaire sent out at this writing, January 15, 1949, 318 replies were received. Out of the 318 answering, 269 felt that the clinics were worthwhile and should be continued. Many made helpful, constructive suggestions or criticisms as to how its usefulness might be increased. Twenty-seven frankly said they had no opinion because they had not seen the clinic in action or had insufficient information upon which to base an opinion.

Twenty-two were opposed to the clinics, saw no use in them, and some felt they did more harm than good. An especially careful scrutiny of these unfavorable comments was made. Some of them really should be put in the "no opinion" group, as their impression was based on either lack of information or actual misinformation particularly as to the function of the clinics in particular and the established basic objectives of the American Cancer Society in general.

Others had apparently sound reasons for their adverse criticisms, which we have no desire to brush lightly aside. Some of the suggestions are already being followed, some tried and found impracticable, and others impossible even though desirable.

Among the principal suggestions for improvement were:

1. More participation of the local physicians in the clinics, bringing instead of sending patients.
2. More advance publicity.
3. Clinical conference at the end of the clinic.
4. Dinner round-table discussion with a local physician presiding.

One physician suggested cutting a watermelon or serving ice cream! Not a bad idea at that.

Unfavorable comments:

1. The clinics are of purely educational value.
2. Inadequate and/or incompetent staff.

3. Inadequate or poor equipment, such as examining instruments.

One critic suggested that we use only Board Certified Specialists and pay them for their services.

It is true that at times the clinics have been inadequately staffed, and that some of the specialists we had counted on either were late or didn't show up at all.

It is not an easy matter to secure specialists who can and will leave their own work for a full day and evening; we are deeply grateful to those who did and those who tried. There is no doubt that the educational value of the clinics is tremendous, and possibly that is its chief justification for their existence. One cannot, however, overlook the fact that such a significant number of patients have been seen and so many positive and suspicious cases detected.

One may ask — Do the results warrant the financial outlay? Organized non-mobile detection centers which must examine large numbers of well persons figure that it costs \$6,000 for every case of cancer detected. That, of course, means *proven* cancers. The average cost of examining each patient in detection centers is \$20.00. The California division spends \$14.50.

The cost of examining around 6,000 patients in the Oklahoma Mobile Unit was \$4.84 each — \$26.40 for positive and \$29.84 for suspicious cases was spent. We expended on our Mobile Unit for three years, beginning December 1, 1945, to August 31, 1948, \$29,230. During this time we found 1,107 positive and 979 suspicious cases. However low an opinion one may have of the ability of our specialists and professional staff, he would at least give us credit for being right in *seven* positives even if wrong in 1,000. The cost of the clinics then does not seem high when compared with the non-mobile type; it is obvious that our clinics have paid large dividends (1) by finding so many positive and suspicious cases, (2) by encouraging early visits to the doctor if symptoms arise, and (3) in helping to establish a routine annual physical examination habit.

MAKE RESERVATIONS NOW!

OKLAHOMA STATE MEDICAL ASSOCIATION

ANNUAL MEETING

Tulsa, Oklahoma

May 16, 17, 18

Mayo Hotel

TREATMENT OF CONSTIPATION IN **mucous colitis**

"The treatment of the constipation in mucous colic does not differ from the treatment of uncomplicated constipation. It is, as always, of great importance to avoid irritating aperients, . . . The stools should be rendered soft and more bulky and therefore more easy to expel with . . . and unirritating vegetable mucilages."

—Hurst, A., in Portis, S. A.: Diseases of the Digestive System, ed. 2, Philadelphia, Lea & Febiger, 1944, p. 692.



MUCOUS COLITIS. In this x-ray is shown the distinctive string-like appearance of the descending portion of the lower bowel in mucous colitis, a condition frequently accompanying severe degrees of spastic or atonic colon. In the sagittal section is shown the over-secretion of mucus adhering to the bowel wall.



By providing soft, demulcent, water-retaining, mucilloid bulk, Metamucil—the "smoothage" treatment of constipation—promotes a return to normal elimination.



METAMUCIL® is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%), as a dispersing agent.

SEARLE *Research in the Service of Medicine*

President's Page

During the last few years our Public Relations Program has made some errors but as a whole each month the fundamental principle of which this program is being developed has continuously made great progress. Now we have been instrumental in aiding the Public Relations Program of the A.M.A. in formulating their program on a National level that will be most informative to the public.

Since we have an efficient secretary to the Committee of Public Relations in the State Office we will be in a better position to put words into action as has never been done before. Now the time has come when the medical doctors and their allied profession should fully cooperate with our Public Relations Committee program by first spending some time with each patient explaining to them the misrepresentation by those opponents of the National Compulsory Health Insurance.

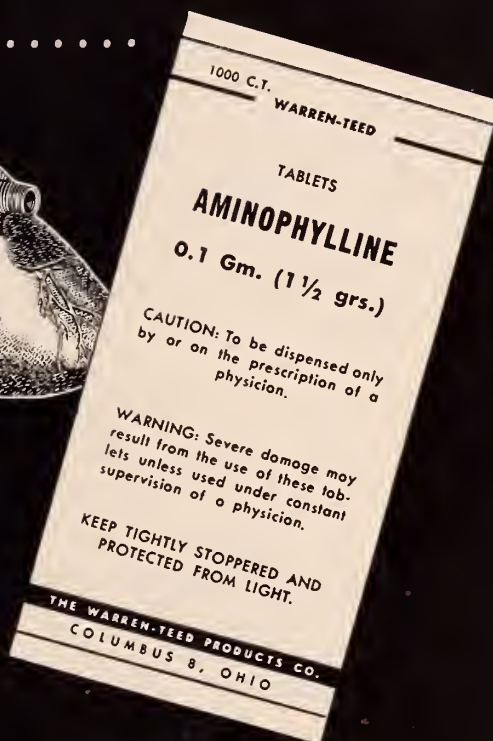
Second, fully informing our representatives of what would happen to the people if such a compulsory health program should become a reality.

Third, that the people would lose their patient relationship with the family doctor and would not have free choice as is so positively stated by the opponents of this bill.

C. E. Northcutt

President.

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PROGRAM

FIFTY-SIXTH ANNUAL SESSION

TULSA — MAY 16, 17 AND 18, 1949

GREETINGS FROM THE TULSA COUNTY MEDICAL SOCIETY

The Tulsa County Medical Society is again privileged to be host to the members of the Oklahoma State Medical Association at the 56th Annual meeting of the organization in Tulsa, May 16-18. An excellent scientific program has been prepared, as well as a number of social events and a special program for the Ladies Auxiliary. Plans have been carefully made to provide for your comfort at Tulsa's excellent hotels, all of which are located conveniently in the downtown area.

You are invited to attend a social hour at 6:30 pm. on Tuesday evening, May 17th in the Ivory Room of the Mayo, as the guests of the Tulsa County Medical Society. This event will immediately precede the President's Annual Dinner Dance.

We sincerely hope that each of you will plan to attend this educational and enjoyable meeting.

Sincerely yours,

JOHN E. McDONALD, M.D., President
Tulsa County Medical Society.

ANNUAL MEETING COMMITTEES - 1949

Annual Session Committee: C. E. Northcutt, M.D., Ponca City, Chairman; George H. Garrison, M.D., Oklahoma City; Lewis J. Moorman, M.D., Oklahoma City.

Scientific Work Committee: H. A. Ruprecht, M.D., Tulsa, Chairman; W. W. Sanger, M.D., Oklahoma City; Maurice J. Searle, M.D., Tulsa; J. H. Robinson, M.D., Oklahoma City; J. M. Parrish, M.D., Oklahoma City.

General Convention Chairman: W. A. Showman, M.D., Tulsa.

Publicity Committee: John G. Matt, M.D., Tulsa, Chairman; Donald V. Crane, M.D., Tulsa; Charles G. Stuard, M.D., Tulsa.

Entertainment Committee: Robert F. Funk, M.D., Tulsa, Chairman; Paul Grosshart, M.D., Tulsa; Jack O. Akins, M.D., Tulsa.

Golf Committee: E. Malcolm Stokes, M.D., Tulsa, Chairman; Roger Q. Atchley, M.D., Tulsa; Averill Sowell, M.D., Tulsa.

Commercial Exhibits Committee: Marshall O. Hart, M.D., Tulsa, Chairman; William C. Ewell, M.D., Tulsa; Walter H. Calhoun, M.D., Tulsa.

Hotels and Registration Committee: John C. Dague, M.D., Tulsa, Chairman, Ben F. Gorrell, M.D., Tulsa; W. Carl Lindstrom, M.D., Tulsa.

GENERAL INFORMATION

HEADQUARTERS

The Mayo Hotel — Tulsa, Oklahoma

ROOM RESERVATIONS

Adequate housing facilities have been arranged at the leading hotels of Tulsa for all delegates, members, and visitors. However, it will not be possible for all to be housed in the convention hotel, The Mayo. All convention reservations should be made through the Reservations Committee, Tulsa County Medical Society, 1202 Medical Arts Building, Tulsa 3, Oklahoma. It is suggested that these reservations be made at the earliest possible date. A written confirmation will be received directly from the hotel at an early date.

In requesting reservations, please state date of arrival, length of stay, type of accommodation desired, and approximate time of registration. Rooms will not be held after 7:00 P.M. except by prior arrangement.

REGISTRATION

Sixteenth Floor — The Mayo Hotel

Registration headquarters will be located immediately in front of the elevators on the Sixteenth Floor of The Mayo at the entrance to the convention hall. All physicians except those from outside the State, visiting guests, and those of intern and military status, must present membership cards for 1949 before registering. Dues for 1949 will not be accepted at the Registration Desk except from County Secretaries. Registration will be from 8:00 A.M. to 5:00 P.M., Monday through Wednesday, May 16-18.

On Sunday, May 15, registration will be on the Mezzanine of The Mayo, 1:00 P.M. to 4:00 P.M. for registration of members of the House of Delegates.

SECTION MEETINGS

All Section Meetings will be held on Monday, Tuesday, and Wednesday, May 16-18, beginning at 2:00 P.M. The Section on Medicine will meet in the Crystal Ballroom of The Mayo, and Section on Surgery will meet in the Ivory Room of The Mayo.

GENERAL SESSIONS

The General Sessions will be held at 9:00 A.M. on Monday, Tuesday, and Wednesday, May 16-18, in the Crystal Ballroom of The Mayo.

HOUSE OF DELEGATES

The House of Delegates will meet on Sunday, May 15, the day preceding the opening of the Scientific Program, in the Ivory Room of The Mayo, 2:00 P.M. The first session will adjourn at approximately 5:30 P.M. and reconvene at 7:00 P.M.

COMMERCIAL EXHIBITS

The Commercial Exhibits will be located on the Sixteenth Floor of The Mayo, Monday through Wednesday, 8:30 A.M. to 5:00 P.M. All visitors are urged to inspect the great variety of commercial exhibits which will be displayed.

COUNCIL

The Council will meet at 10:00 A.M. on Sunday, May 15, and subsequently upon call by the President.

PRESIDENT'S ANNUAL DINNER DANCE

The President's Annual Dinner Dance will be held on Tuesday, May 17, at 8:00 P.M., in the Crystal Ballroom of The Mayo. Dancing will begin at 10:00 P.M. and continue through 1:00 A.M. The Tulsa County Medical Society will be host at a social hour immediately preceding the dinner, at 6:30 P.M. on the Mezzanine of The Mayo. Tickets may be purchased at the Registration Desk.

ROUNDTABLE LUNCHEONS

Roundtable luncheons will be held daily Monday through Wednesday, May 16-18, at 12:30 P.M. The Section on Medicine Luncheon will be in the Ivory Room of The Mayo, and the Section on Surgery Luncheon in the Open Mezzanine Parlors of The Mayo. Tickets are limited in number and should be purchased at the Registration Desk as early as possible.

GOLF TOURNAMENT

A Golf Tournament will be held at 1:00 P.M. on Monday, May 16 at the Tulsa Country Club. A subscription dinner will follow at 7:00 P.M. Prizes for low scores. Complete details at the Registration Desk.

PAST PRESIDENTS' BREAKFAST

A breakfast for all past Presidents of the Oklahoma State Medical Association will be held at 8:00 A.M. Tuesday at The Mayo.

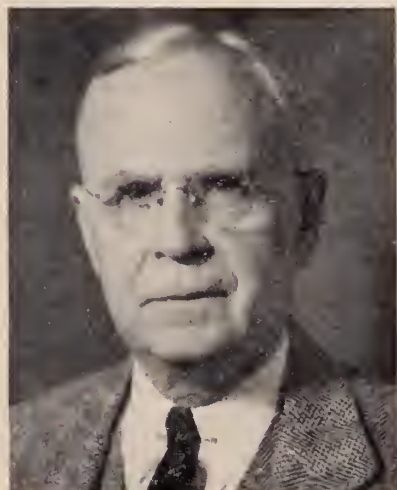
OFFICERS OF OKLAHOMA STATE MEDICAL ASSOCIATION



George H. Garrison, M.D.
Oklahoma City
President-Elect



C. E. Northcutt, M.D.
Ponca City
President



Lewis J. Moorman, M.D.
Oklahoma City
Secretary-Treasurer



L. Chester McHenry, M.D.
Oklahoma City
Speaker of the House of Delegates

YOUR CONVENTION AT A GLANCE

SUNDAY, MAY 15, 1949

- 10:00 A.M.—Council Meeting.
- 2:00 P.M.—House of Delegates, Ivory Room, The Mayo.
- 7:00 P.M.—House of Delegates, Ivory Room, The Mayo.

MONDAY, MAY 16, 1949

- 8:00 A.M.—General registration opens.
- 9:00 A.M.—General Session, Crystal Ballroom, The Mayo.
- 9:00 A.M.—House of Delegates, Junior Ballroom, The Mayo, (if third meeting is necessary).
- 12:30 P.M.—Roundtable Luncheons.
- 1:00 P.M.—Golf Tournament, Tulsa Country Club.
- 2:00 P.M.—Section Meetings, The Mayo.
- 6:00 P.M.—O. U. Alumni Fellowship Hour, Open Mezzanine Parlors, The Mayo.
- 7:00 P.M.—O. U. Alumni Dinner, Ivory Room, The Mayo.
- 7:00 P.M.—Subscription Golf Tournament Dinner, Tulsa Country Club.

TUESDAY, MAY 17, 1949

- 8:00 A.M.—Past Presidents' Breakfast, The Mayo.
- 9:00 A.M.—General Session, Crystal Ballroom, The Mayo.
- 12:30 P.M.—Roundtable Luncheons.
- 2:00 P.M.—Section Meetings, The Mayo.
- 6:30 P.M.—Tulsa County Medical Society Social Hour, Open Mezzanine Parlors, The Mayo.
- 8:00 P.M.—President's Annual Dinner Dance, Crystal Ballroom, The Mayo.
- 10:00 P.M.—Dancing, Crystal Ballroom, The Mayo. Joe Linde and Orchestra.

WEDNESDAY, MAY 18, 1949

- 9:00 A.M.—General Session, Crystal Ballroom, The Mayo.
- 12:30 P.M.—Roundtable Luncheons.
- 2:00 P.M.—Section Meetings, The Mayo.
- 2:00 P.M.—Meeting of County Medical Society Officers, Junior Ballroom, The Mayo.
- 5:00 P.M.—Convention Closes.

THE ALUMNI ASSOCIATION OF THE UNIVERSITY OF OKLAHOMA
SCHOOL OF MEDICINE

MONDAY EVENING

MAY 16, 1949

IVORY ROOM, MAYO HOTEL, TULSA, OKLAHOMA

Annual Banquet

- 6:30 P.M.—1. Dinner for all doctors and wives attending the Oklahoma State Medical Association Annual Meeting, Evans Talley, M.D., President, presiding, Ivory Room, The Mayo.
- 2. Report of the Nomination Committee.
- 3. Election of officers.
- 4. 10-YEAR CLASS REUNIONS:
 - Class of 1909—introduced by Samuel Hamilton, M.D., Non, Okla.
 - Class of 1919—introduced by Walter Huber, M.D., Tulsa, Okla.
 - Class of 1929—introduced by I. F. Stephenson, M.D., Alva, Okla.
 - Class of 1939—introduced by Curtis Yeary, M.D., Ponca City, Okla.
- 5. Honoring of Professors Emeritus:
 - Louis A. Turley, Ph.D., Pathology, by Howard Hopps, M.D., Oklahoma City, Oklahoma.
 - James G. Binkley, M.D., Obstetrics, by J. M. Parrish, Jr., M.D., Oklahoma City, Oklahoma.
- 6. Brief Resumé of the Preceptorship Program in Oklahoma, J. William Finch, M.D., Hobart, Oklahoma.
- 7. Brief Resume of the School of Medicine of the University of Oklahoma, Dean Mark Everett, Ph.D., Oklahoma City, Oklahoma.
- 8. The Oklahoma Medical Research Foundation, Waldo E. Stephens, Ph.D., Oklahoma City, Oklahoma.

GUEST SPEAKERS



J. EDWARD BERK, M.D., Philadelphia, Pa. Medicine. Assistant Professor of Medicine, Temple University School of Medicine, Philadelphia. Honorary Consultant to Surgeon General U. S. Army, 1947. Fellow, American College Physicians. Member American Gastro-Enterological Association. American Federal Clinical Research.



CHARLES DECATUR BLASSINGAME, M.D., Memphis, Tennessee. Otolaryngology. Diplomate of the American Board of Otolaryngology. Clinical Associate, Department of Otolaryngology, University of Tennessee School of Medicine, Memphis, Tennessee. Fellow of the American College of Surgeons. Member of American Academy of Ophthalmology and Otolaryngology.



C. CHARLES BURLINGAME, M.D., Hartford, Connecticut. Psychiatry and Neurology. President and Psychiatrist-in-Chief, Institute of Living (Formerly Neurological-Psychiatric Institute of the Hartford Retreat), Hartford, Connecticut. Formerly Professor of Psychiatry, Yale University School of Medicine. Diplomate of the American Board of Psychiatry and Neurology. Fellow of the American College of Physicians, member of the American Psychiatric Association and Association for Study of Internal Secretions. Chairman of the Sub-Committee on Psychiatry, Industrial Medicine Council of the National Association of Manufacturers.

GUEST SPEAKERS



JOHN ALBERT KEY, M.D., St. Louis, Missouri. Orthopedic Surgery. Professor of Orthopedic Surgery, Washington University School of Medicine, St. Louis, Missouri. Diplomate of the American Board of Orthopedic Surgery. Visiting Orthopedic Surgeon, Barnes General Hospital, St. Louis. Member of the American College of Surgeons, American Academy of Orthopedic Surgeons, and American Surgical Association.



WILLIAM JAMES GARDNER, M.D., Cleveland, Ohio. Neurological Surgery. Member of the Staff, Department of Neurological Surgery, Cleveland Clinic Foundation, Cleveland, Ohio. Diplomate of the American Board of Neurological Surgery. Commander, Medical Corps, United States Naval Reserve. Member of the Society of Neurological Surgeons, Central Neuropsychiatric Association, and Fellow of the American College of Surgeons.



PAUL ARTHUR O'LEARY, M.D., Rochester, Minnesota. Dermatology and Syphilology. Director of the Section of Dermatology and Syphilology, Mayo Clinic Foundation, Rochester, Minnesota. Professor of Dermatology, Mayo Foundation Graduate School of Medicine, Diplomate of the American Board of Dermatology and Syphilology. Member and Former President of the American Academy of Dermatology and Syphilology. Fellow of the American College of Physicians. Member of the Society for Investigative Dermatology, Mississippi Valley Dermatological Association and American Dermatological Association.

GUEST SPEAKERS



MYRON EZRA WEGMAN, M.D., New Orleans, Louisiana. Public Health, Professor of Public Health, Louisiana State University School of Medicine, New Orleans, Louisiana. Diplomate of the American Board of Pediatrics. Formerly member of the Faculty of Johns Hopkins School of Medicine, Yale University School of Medicine, and Cornell University School of Medicine. Member of the American Academy of Pediatrics and American Public Health Association. Widely known lecturer in Public Health and Consultant to agencies of child hygiene and public health.



FRANK E. WHITACRE, M.D., Memphis, Tennessee. Obstetrics and Gynecology. Member of the American Board of Obs.-Gyn. Professor of obstetrics-gynecology, University of Tennessee School of Medicine. Prominent practicing obstetrician and gynecologist of Memphis, Tennessee.



WOLFGANG, WILLIAM ZUELZER, M.D., Detroit, Michigan. Pediatrics. Chief of Staff and Director of Children's Hospital of Michigan, Detroit, Michigan. Widely known authority in the field of Pediatrics.

WOMEN'S AUXILIARY OKLAHOMA STATE MEDICAL ASSOCIATION

STATE AUXILIARY OFFICERS

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Oklahoma City

President-Elect

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Shawnee

Vice-President

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Oklahoma City



Mrs. Clinton Gallaher, Pres.-Elect
Shawnee



Mrs. J. W. Kelso, President
Oklahoma City
Southern Medical Association
Auxiliary

CONVENTION PROGRAM

Sunday, May 15, 1949

4:00 P.M.-6:00 P.M.—Registration, Mezzanine, The Mayo.

Monday, May 16, 1949

9:00 A.M.—Registration, Mezzanine, The Mayo.

2:00 P.M.—Executive Board Meeting, Home of Mrs. Donald L. Mishler, 2219 Terwilliger.

7:00 P.M.—O. U. Alumni Dinner Dance, Ivory Room, The Mayo.

Tuesday, May 17, 1949

10:00 A.M.-12:00—Business Meeting, Recreation Room, YWCA.

1:00 P.M.—Luncheon, Sky Terrace, Tulsa Club.

7:00 P.M.—Dinner Dance, Crystal Ballroom, The Mayo.

Wednesday, May 18, 1949

10:00 A.M.-12:00—Business Meeting, Recreation Room, YWCA.

12:30 P.M.—Post Convention Board Meeting, Terrace Room, The Mayo.

SCIENTIFIC PROGRAM

MONDAY, MAY 16

GENERAL SESSION

CRYSTAL BALLROOM, THE MAYO

Chairman: George H. Garrison, M.D., Oklahoma City

- 9:00 A.M.—“Clinical Laboratory Considerations in the Diagnosis of Pancreatic Cancer”—Edward Berk, M.D., Philadelphia.
9:30 A.M.—“The Management of Diabetes Mellitus”—Bert F. Keltz, M.D., Oklahoma City.
10:00 A.M.—“Paroxysmal Lacrimation”—W. James Gardner, M.D., Cleveland, Ohio.
10:30 A.M.—“Early Experiences With Retro-Pubic Prostatectomy”—Berget H. Blocksom, M.D., Tulsa.
11:00 A.M.—“Present Status of Penicillin in the Treatment of Syphilis”—Paul A. O’Leary, M.D., Rochester, Minnesota.
11:30 A.M.—“Roentgen Diagnosis of Pulmonary Metastases”—Peter E. Russo, M.D., Oklahoma City.

SURGERY SECTION

IVORY ROOM, THE MAYO

Chairman, John E. McDonald, M.D., Tulsa

- 2:00 P.M.—“Allergy in Ophthalmology”—George Tulloch, M.D., Bartlesville.
2:15 P.M.—“Management of Your Patients With Eye Problems”—Donald V. Crane, M.D., Tulsa.
2:30 P.M.—“Congenital Anomalies of the Eyes”—Fred D. Switzer, M.D., Hugo.
2:45 P.M.—“Technical Procedures in the Management of Diseases Involving the Sinuses”—Charles B. Blassingame, M.D., Memphis, Tennessee.
3:15 P.M.—General Discussion, Eye, Ear, Nose and Throat.
3:30 P.M.—“Intra-Ventricular Brain Tumors”—Lucien M. Pascucci, M.D., Tulsa.
3:45 P.M.—“Early Ambulation of Surgical Cases”—J. V. Athey, M.D., Bartlesville.
4:00 P.M.—“Newer Concepts in the Treatment of Bronchiectasis”—Robert L. Anderson, M.D., Tulsa.
4:15 P.M.—“Treatment of Fractures in the Region of the Knee Joint”—John Albert Key, M.D., St. Louis, Missouri.
4:45 P.M.—General Discussion, General Surgery.

MEDICINE SECTION

CRYSTAL BALLROOM, THE MAYO

Chairman: Robert H. Bayley, M. D., Oklahoma City

- 2:00 P.M.—“Non-Venereal Diseases of the Male Genitalia”—Hervey A. Foerster, M.D., Oklahoma City.
2:15 P.M.—“Contact Dermatitis”—W. A. Showman, M.D., Tulsa.
2:30 P.M.—“Treatment of Herpes Zoster”—William H. Doyle, M.D., Muskogee.
2:45 P.M.—“The Dermatoscleroses”—Paul A. O’Leary, M.D., Rochester, Minnesota.
3:15 P.M.—General Discussion, Dermatology.
3:30 P.M.—“The EEG In Severe Head Injuries With Tantalum Cranioplasty”—Milford S. Ungerman, M.D., Tulsa.
3:45 P.M.—“Newer Concepts of Epilepsy”—Tom R. Turner, M.D., Tulsa, and Robert A. Hayne, M.D., Tulsa.
4:00 P.M.—“Psychomatic Aspects of Pseudoendocrinopathies”—Henry H. Turner, M.D., Oklahoma City.
4:15 P.M.—“Psychiatry and Medicine—One Road Ahead”—C. C. Burlingame, M.D., Hartford, Connecticut.
4:45 P.M.—General Discussion, Psychiatry and Neurology.

TUESDAY, MAY 17 GENERAL SESSION

CRYSTAL BALLROOM, THE MAYO

Chairman: C. E. Northcutt, M.D., Ponca City

- 9:00 A.M.—“Diagnosis and Treatment of Low Back Pain” — John Albert Key, M.D., St. Louis, Missouri.
- 9:30 A.M.—“Common Uses of Fluid Balance in Surgery”—Edward L. Moore, M.D., Tulsa.
- 10:00 A.M.—“Diagnosis and Treatment of Sinus and So-Called Sinus Disease”—Charles B. Blassingame, M.D., Memphis, Tennessee.
- 10:30 P.M.—“Strabismus in Children”—Richard Clay, M.D., Oklahoma City.
- 11:00 A.M.—“The Emotions Under a Microscope”—C. C. Burlingame, M.D., Hartford, Connecticut.
- 11:30 A.M.—“Handling the Patient with Emotional Problems”—G. H. Guthrey, M.D., Oklahoma City.

SURGERY SECTION

IVORY ROOM, THE MAYO

Chairman: Berget H. Blocksom, M.D., Tulsa

- 2:00 P.M.—“I’ve Felt This Way Since Mary Was Born”—Gerald Rogers, M.D., Oklahoma City.
- 2:15 P.M.—“Bleeding in Early Pregnancy”—W. Carl Lindstrom, M.D., Tulsa.
- 2:30 P.M.—“Carcinogenic Effects of Estrogen”—E. Malcolm Stokes, M.D., Tulsa.
- 2:45 P.M.—“Early Ectopic Pregnancy—Diagnosis and Treatment”—Frank E. Whitacre, M.D., Memphis, Tennessee.
- 3:15 P.M.—General Discussion, Obstetrics and Gynecology.
- 3:30 P.M.—“An Evaluation of the Different Methods of Prostatectomy”—Basil A. Hayes, M.D., Oklahoma City.
- 3:45 P.M.—“Nephroptosis”—Alfred R. Sugg, M.D., Ada.
- 4:00 P.M.—“Trends in the Treatment of Cancer of the Bladder”—Maxwell A. Johnson, M.D., Tulsa.
- 4:15 P.M.—General Discussion, Urology.
- 4:30 P.M.—“Tantalum Cranioplasty”—W. James Gardner, M.D., Cleveland, Ohio.

MEDICINE SECTION

CRYSTAL BALLROOM, THE MAYO

Chairman: Frank J. Nelson, M.D., Tulsa

- 2:00 P.M.—Clinical Pathological Conference (45 Minutes)—Emil E. Palik, M.D., Tulsa, Discussion Leader.
- 2:45 P.M.—“Cancer of the Stomach—Clinical Problems Influencing Prognosis”—J. Edward Berk, M.D., Philadelphia.
- 3:15 P.M.—“Roentgen Diagnosis of Cardiac Lesions”—Walter E. Brown, M.D., Tulsa.
- 3:30 P.M.—“Pediatrics in General Practice”—H. Violet Sturgeon, M.D., Hennessey.
- 3:45 P.M.—“Hay Fever in Infants”—Thurman Shuller, M.D., McAlester.
- 4:00 P.M.—“Meningitis in Infants—Its Treatment and Diagnosis”—L. S. Frank, M.D., Oklahoma City.
- 4:15 P.M.—“Tumors in Early Life”—W. W. Zuelzer, M.D., Detroit, Michigan.
- 4:45 P.M.—General Discussion, Pediatrics.

WEDNESDAY, MAY 18 GENERAL SESSION

CRYSTAL BALLROOM, THE MAYO

Chairman: Homer A. Ruprecht, M.D., Tulsa

- 9:00 A.M.—“Late Ectopic Pregnancy—Diagnosis and Treatment”—Frank E. Whitacre, M.D., Memphis, Tennessee.
9:30 A.M.—“Recent Advances in the Use of the Antibiotics”—Earl I. Mulmed, M.D., Tulsa.
10:00 A.M.—“Health Services for School Children”—Myron E. Wegman, M.D., New Orleans, Louisiana.
10:30 A.M.—“Medical Aspects of Atomic Energy”—Edwin G. Williams, M.D., Washington, D. C.
11:00 A.M.—“Intestinal Obstruction in Infancy”—W. W. Zuelzer, M.D., Detroit, Michigan.
11:30 A.M.—“Aminopterin in Leukemia”—George R. Russell, M.D., Tulsa, and Emil E. Palik, M.D., Tulsa.

SURGERY SECTION

IVORY ROOM, THE MAYO

Chairman: R. B. Howard, M. D., Oklahoma City

- 2:00 P.M.—“Infantile Cortical Hyperostosis”—Clair Cavanaugh, M.D., Oklahoma City.
2:15 P.M.—“Multiple Myeloma”—Herman Bender, M.D., Oklahoma City.
2:30 P.M.—“Roentgen Diagnosis of Early Lesions of the Antrum of the Stomach”—Simon Pollack, M.D., Tulsa.
2:45 P.M.—“Perforated Peptic Ulcer”—Oscar White, M.D., Oklahoma City.
3:00 P.M.—“Surgery In Peptic Ulcer—Report of a Case”—Evans E. Chambers, M.D., Enid.
3:15 P.M.—“The Relation of Psychology to Surgery”—Louis H. Ritzhaupt, M.D., Guthrie.
3:30 P.M.—“Common Complaints of Pregnancy”—L. C. Northrup, M.D., Tulsa.
3:45 P.M.—“Diseases of the Cervix and Uteri”—Matthew B. Moore, M.D., Tulsa.
4:00 P.M.—“An Analysis of the Gynecological Services of University Hospitals, 1938-1948”—Grider Penick, M.D., Oklahoma City.
4:15 P.M.—“Headaches”—George S. Wilson, M.D., Enid.
4:30 P.M.—“Chronic Rhinitis”—A. C. McFarling, M.D., Shawnee, Oklahoma.
4:45 P.M.—“Chronic Maxillary Sinusitis”—Theodore G. Wails, M.D., Oklahoma City.

MEDICINE SECTION

CRYSTAL BALLROOM, THE MAYO

Chairman: Bert F. Keltz, M.D., Oklahoma City

- 2:00 P.M.—“The Role of the University Hospital in the Cancer Program”—Henry G. Bennett, M.D., Oklahoma City.
2:15 P.M.—“The Management of Syphilis in Pregnancy”—David V. Hudson, M.D., Tulsa.
2:30 P.M.—“The Prevention of Dental Caries”—Frank Bertram, D.D.S., Oklahoma State Department of Health, Oklahoma City.
2:45 P.M.—“The Task of the Practitioner in Child Health Protection”—Myron E. Wegman, M.D., New Orleans, Louisiana.
3:15 P.M.—“The Practitioner's Relationship to Public Health”—Ned Burleson, M.D., Prague.
3:30 P.M.—“Participation of a Practicing Physician in a Local Health Service”—Charles E. Green, M.D., Lawton.
3:45 P.M.—General Discussion, Public Health.
4:00 P.M.—“Congestive Heart Failure”—John B. Morey, M.D., Ada.
4:15 P.M.—“The Pathology and Physiology of Jaundice”—John R. Taylor, M.D., Kingfisher.
4:30 P.M.—“The Course and Mechanics of Heart Failure—A 10 Year Survey at the University of Oklahoma School of Medicine and University Hospital”—W. T. McColum, M.D., Oklahoma City.
4:45 P.M.—General Discussion, General Medicine.

PRESIDENT'S INAUGURAL DINNER DANCE



A. L. Conrad

Crystal Ballroom—The Mayo

A. L. Conrad

Associate Administrator of the National

Physicians Committee for the Extension

of Medical Service

Chicago, Illinois

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DELEGATES AND ALTERNATES

County
Alfalfa
Atoka-Bryan-Coal-Johnston

Beckham
Blaine
Caddo
Canadian
Carter

Cherokee
Choctaw-McCurtain-
Pushmataha
Cleveland

Comanche
Cotton
Craig
Creek
Custer
Garfield

Garvin
Grant
Grady
Greer
Harmon
Haskell
Hughes
Jackson
Jefferson
Kay-Noble

Kingfisher
Kiowa
LeFlore
Lincoln
Logan

Delegate
W. G. Dunnington
T. H. Briggs
W. W. Cotton
A. T. Baker
H. K. Speed
W. F. Bohlman
J. B. Miles
Malcom E. Phelps
F. M. Boadway
C. A. Johnson
H. A. Masters
Not Received

Phil Haddock
W. T. Mayfield
Fred T. Fox
Willard L. McGraw
F. M. Adams
O. H. Cowart
J. Guild Wood
J. Wendell Mercer

Carl T. Steen
R. W. Choice
Harold H. Macumber
J. B. Hollis
Russell H. Lynch
K. N. Roberts
Hartzell Schaff
E. W. Mabry
W. T. Andreskowski
Eugene Arrendell
L. G. Neal
C. H. Cooke
C. M. Hodgson
William Bernell
S. D. Beville
Ned Burleson
L. H. Ritzhaupt

Alternate
Forrest Hales
J. B. Clark
J. S. Fulton
C. F. Moore
E. S. Kilpatrick

E. T. Cook, Jr.
Alpha L. Johnson
Joe Karlick
James O. Asher
R. K. McIntosh

T. A. Ragan
Mabelle S. Collins
Byron Aycock
Henry C. Smith
J. B. Darrough
Walter Cale
McLain Rogers
F. A. Hudson
George T. Ross
M. E. Robberson, Jr.
F. P. Robinson
R. R. Coates
Fred W. Sellers
C. N. Talley
J. C. Rumley
Paul Kernek
R. H. Fox
Philip Kouri
Glen Kreger
L. H. Becker
J. W. Francis
Frank C. Lattimore
J. P. Braum
F. P. Baker
Harold T. Baugh
J. S. Petty

| <i>County</i> | <i>Delegate</i> | <i>Alternate</i> |
|---------------------------|---------------------|-----------------------|
| Mayes | Carl Puckett | E. H. Werling |
| McClain | Ralph Royster | W. C. McCurdy, Jr. |
| McIntosh | F. R. First, Jr. | W. E. Wendell |
| Muskogee-Sequoyah-Wagoner | L. S. McAlister | Geo. L. Kaiser |
| | W. N. Weaver | E. M. Henry |
| | R. N. Holcombe | J. E. Horn |
| Northwestern | R. G. Obermiller | Joe L. Duer |
| | O. C. Newman | Arthur Buell |
| | E. A. McGrew | H. K. Hill |
| | H. Walker | |
| | D. Vincent | |
| Okfuskee | A. S. Melton | L. J. Spickard |
| Oklahoma | Austin H. Bell | Tom Wainwright |
| | Harry Deupree | Edward M. Farris |
| | W. E. Eastland | Vance Bradford |
| | Lee K. Emenhiser | N. F. V. Barkett |
| | Harry Ford | Everett B. Neff |
| | Stearley Harrison | Harry T. Avey |
| | Onis George Hazel | Henry G. Bennett, Jr. |
| | Jess D. Herrmann | Lou H. Charney |
| | W. K. Ishmael | S. N. Stone |
| | George H. Kimball | Jim Taylor |
| | L. C. McHenry | Charles Hugh Wilson |
| | Milam F. McKinney | A. M. Young, III |
| | W. W. Rucks, Jr. | R. B. Howard |
| | Howard B. Shorbe | C. M. O'Leary |
| | J. B. Snow | Gerald Rogers |
| Okmulgee | Robert T. Sturm | Meredith M. Appleton |
| | I. W. Bollinger | C. E. Smith |
| | J. G. Edwards | D. W. McCauley |
| Osage | Robert Dean | Roscoe Walker |
| Ottawa | W. J. Sayles | Rex Graham |
| Payne-Pawnee | C. M. Bassett | L. A. Mitchell |
| | Howard L. Puckett | A. B. Smith |
| | L. A. Mitchell | M. L. Saddoris |
| Pittsburg | C. E. Lively | T. H. McCarley |
| Pontotoc-Murray | E. D. Padberg | Ollie McBride |
| | William T. Gill | George K. Stephens |
| | J. A. Wrenn | R. W. Morton |
| Pottawatomie | E. E. Rice | J. M. Carson |
| | W. M. Gallaher | C. C. Young |
| Rogers | P. S. Anderson | W. A. Howard |
| Seminole | Claude Chambers | Julian Wood |
| Stephens | Wallis S. Ivy | <i>Not Received</i> |
| Texas | <i>Not Received</i> | |
| Tillman | Roy L. Fisher | George Tallant |
| Tulsa | Charles G. Stuard | Fred E. Woodson |
| | Walter S. Larrabee | Logan A. Spann |
| | Victor K. Allen | I. H. Nelson |
| | M. V. Stanley | A. Ray Wiley |
| | H. A. Ruprecht | R. Q. Atchley |
| | A. B. Carney | Herbert S. Orr |
| | W. A. Showman | J. D. Shipp |
| | W. D. Hoover | Donald V. Crane |
| | John G. Matt | H. B. Stewart |
| | W. A. Dean | Robert E. Funk |
| Washington-Nowata | L. B. Word | J. V. Athey |
| | F. S. Etter | H. E. Denyer |
| | S. A. Lang | Felix Adams |
| Washita | James F. McMurry | Aubrey E. Stowers |
| Woods | C. A. Traverse | R. A. Whiteneck |

AMALGAMATIONS

The following have made application for amalgamation of county societies. All requirements have been met and the applications are in order for presentation to the Council and House of Delegates:

LeFlore-Haskell County Medical Societies

Garfield-Kingfisher County Medical Societies

Rogers-Mayes County Medical Societies

Craig-Ottawa County Medical Societies (held over from 1948 as the application was submitted too late to meet the requirements as specified in the Constitution of the Oklahoma State Medical Association).

ASSOCIATE MEMBERSHIP

The following application has been presented for Associate Membership. The application is in order for presentation to the Council and House of Delegates:

E. Harold Hinman, M.D., Norman, Oklahoma.

TECHNICAL EXHIBITS

The following companies will exhibit at the 56th Annual Meeting of the Oklahoma State Medical Association. Plans have been made for attractive, helpful booths. Make it a point to visit the commercial exhibits to keep abreast in new commercial offerings to the medical profession of Oklahoma.

| <i>Booth No.</i> | <i>Firm</i> | <i>Location</i> |
|------------------|--|------------------------|
| 1 | C. V. Mosby Company | St. Louis, Mo. |
| 2 | Warren-Teed Products | Columbus, Ohio |
| 3 | Mead-Johnson Company | Evansville, Indiana |
| 4 | Carnation Milk Company | Oconomowoc, Wisconsin |
| 5 | William S. Merrill Company | Cincinnati, Ohio |
| 6 | Merkel X-Ray Corporation | Tulsa, Oklahoma |
| 7 | Mid-Continent Surgical Supply Co. | Tulsa, Oklahoma |
| 8 | M. & R. Dietetic Laboratories | Columbus, Ohio |
| 9 | Eli Lilly Company | Indianapolis, Ind. |
| 10 | Physicians Sales and Service Company | Oklahoma City, Okla. |
| 11 | Lederle Laboratories | New York, New York |
| 12 | Caviness-Melton Surgical Supply Co. | Oklahoma City, Okla. |
| 13 | Tri-State Pharmaceutical Company | Oklahoma City, Okla. |
| 14 | Dictaphone Company | Tulsa, Oklahoma |
| 15 | W. C. Scott & Company | Kansas City, Mo. |
| 16 | Ortho Products | Linden, New Jersey |
| 17 | E. R. Squibb and Sons | New York, New York |
| 18 | Roach Drug Company | Oklahoma City, Okla. |
| 19 | Coca Cola Bottling Company | Tulsa, Oklahoma |
| 20 | H. G. Fischer and Company | Chicago, Ill. |
| 21 | J. A. Majors and Company | New Orleans, La. |
| 22 | Schering Corporation | Bloomfield, New Jersey |
| 23 | G. D. Searle and Company | Chicago, Ill. |
| 24 | A. S. Aloe Company | St. Louis, Mo. |
| 25 | Ciba Pharmaceutical Products | Summit, New Jersey |
| 26 | Philip Morris Tobacco Company | New York, New York |
| 27 | Mid-West Surgical Supply Company | Wichita, Kansas |
| 28 | General Electric X-Ray Corporation | Tulsa, Oklahoma |
| 29 | Lanteen Medical Laboratories | Chicago, Ill. |
| 30 | Smith-Dorsey Company | Lincoln, Nebr. |
| 31 | U. S. Vitamin Corporation | Chicago, Ill. |
| 32 | United Medical Equipment Corporation | Kansas City, Mo. |
| 33 | Producers Creamery Company | Springfield, Mo. |
| 34 | Parke-Davis and Company | Detroit, Mich. |
| 35 | J. B. Lippincott Company | Philadelphia, Pa. |

50 and 2

YEARS TREATING ALCOHOL AND DRUG ADDICTION

In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

Twenty-five years ago experience had bettered the methods. Today with the advantages of collateral medicine, treatment is markedly further improved.

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GENERAL NEWS

HOUSE OF DELEGATES UNANIMOUSLY ADOPTS SPECIAL ASSESSMENT RESOLUTION

SPECIAL SESSION DRAWS LARGE ATTENDANCE; PROGRAM EXPLAINED

The \$25.00 special assessment voted by the American Medical Association at the Interim Session in November was unanimously approved by the Oklahoma State Medical Association House of Delegates at the special session held in Oklahoma City February 20.

The special session, originally scheduled for January 30, was postponed because of inclement weather. All members of the Oklahoma State Medical Association were invited to attend the session and officers of the Women's Auxiliary were also asked to sit in on the discussion. More than 200 members and delegates were in attendance.

Chief purpose of the special House of Delegates session was the discussion and implementation of the A.M.A. educational program. No other business of the Association was taken up by the House of Delegates at that time.

Although the guest speaker, Gunnar Gundersen, M.D., LaCrosse, Wis., member of the A.M.A. Board of Trustees, originally scheduled to appear on the program was unable to attend, the Oklahoma A.M.A. delegates, James Stevenson, M.D., Tulsa, and Charles F. Rountree, M.D., Oklahoma City, gave the background on the action taken at the Interim Session in St. Louis and explained the program in detail. John F. Burton, M.D., Oklahoma City, vice-chairman of the Oklahoma State Medical Association Public Policy Committee, and Oklahoma representative on the A.M.A. advisory committee of 53 representatives of state and territories, reported on the meeting in Chicago February 12 and told the group how the money obtained from the \$25.00 special assessment would be spent to promote the educational program.

The afternoon session of the House of Delegates was devoted to discussion on the floor. At that time, everyone present was given an opportunity to express an opinion about the assessment and questions on the subject were explained by those who had attended the A.M.A. sessions held to discuss the educational program.

On recommendation of the Council, the resolution given below was unanimously adopted and the co-operation of all O.S.M.A. members was pledged in the program as set up by the A.M.A.

RESOLUTION

WHEREAS, the House of Delegates of the American Medical Association, in accordance with its Constitution and By-Laws and on recommendation of the Board of Trustees, levied a special assessment of \$25.00 on each member of the American Medical Association at the regular Interim Session in St. Louis on December 1, 1948, and

WHEREAS, each member of the Oklahoma State Medical Association is, by virtue of such membership also a member of the American Medical Association, and,

WHEREAS, the Board of Trustees of the American Medical Association which was authorized by the House of Delegates to proceed with collection of the assessment has requested each State Association to make the collection from American Medical Association members in the state and to take such disciplinary action as it deems proper to enforce such collections, and

WHEREAS, those members of the State Association holding classes of membership in their State Association which entitles them to exemption from State dues and assessments are not liable for payment of the assessment, and

WHEREAS, the State Associations are authorized to exempt from the assessment those members on which its payment would be an undue hardship, and

WHEREAS, the determination of such undue hardship is the prerogative of the County Medical Societies, and

WHEREAS, The Oklahoma State Medical Association has long recognized the necessity for a national program of education and public relations directed toward meeting the constant threat of socialized medicine, and

WHEREAS, the program of the American Medical Association to be financed by the \$25.00 special assessment is designed to protect the health and welfare of the nation through education and public relations emphasizing to the people, Congress and the profession the destructive effects which any type of National Compulsory Health Insurance and/or any type of government insurance would produce in the health and medical care of the people; the unbearable impact it would have on the national economy and the taxpayer; and the ethical, moral and scientific degeneration such systems have invariably produced in the medical profession, and the unfortunate effects upon the people in general, now therefore,

BE IT RESOLVED, by the House of Delegates of the Oklahoma State Medical Association, in special session in Oklahoma City, Oklahoma, this twentieth day of February, 1949, that the \$25.00 special assessment of the American Medical Association shall constitute a special assessment of the Oklahoma State Medical Association of \$25.00 on each of its active members to be remitted to the American Medical Association for its Educational Program, and that Honorary and Life Members of the Oklahoma State Medical Association shall be exempt from this special assessment as provided by the Constitution and By-Laws, and

BE IT FURTHER RESOLVED, that the above assessment shall be levied for the year 1949 and shall be payable by all who are or become members of the Oklahoma State Medical Association during the year 1949 except those becoming members who have paid the assessment of the American Medical Association by virtue of previous membership in another State Association, and

BE IT FURTHER RESOLVED, that the payment of the Special Assessment is due and payable for all members of the Oklahoma State Medical Association as of record on December 31, 1948 on or before May 1, 1949 and on all subsequent members upon becoming members, and

BE IT FURTHER RESOLVED, that those becoming members of the American Medical Association during 1949 who have not been in the active practice of medicine for one year next preceding their election to membership shall not be liable for payment of this assessment, and

BE IT FURTHER RESOLVED, that those members who are exempt from payment of this assessment are invited to make such payment as a voluntary contribution if financially able to do so, and

BE IT FURTHER RESOLVED, that the Council of the Oklahoma State Medical Association is authorized and instructed to establish such procedure as may be necessary to effect collection of this assessment in accordance with the terms of this resolution and the provisions of the Constitution and By-Laws of the Oklahoma State Medical Association.

COUNCIL RECOMMENDATIONS FOR PROCEDURE FOR COLLECTION OF THE A.M.A. SPECIAL ASSESSMENT

It is recommended:

1. That statements of the assessment be prepared by the Executive Office and directed to each member of the Association who, under the terms of the action of the House of Delegates, is liable for payment of the assessment. These statements should notify each member that payment of the assessment is to be made to the Secretary of his own County Society.

2. That the Executive Office will notify each County Secretary as to the members of his County Society who are subject to the assessment and receive statements.

3. That the determination as to exemptions of members on the basis of undue hardship will be the responsibility of the County Societies. In order that these cases will receive careful and thorough consideration it will be necessary that the County Society action be taken at a regular or specially called meeting.

4. That the Executive Office will provide forms to the County Secretaries

- a. on which collections will be reported
- b. for the rendering of adequate receipts to each member who pays the assessment
- c. for certifying undue hardship cases to the State Office.

The Public Policy Committee of the Oklahoma State Medical Association met the Saturday afternoon preceding the House of Delegates Session. The Committee discussed the special assessment and the ways and means of collection, and made several recommendations to the Council concerning the educational program. Plans were also developed by the group for cooperating with the A.M.A. and for coordinating the O.S.M.A. program with that of the A.M.A.

POSTGRADUATE MEETING WELL ATTENDED

The State Postgraduate Committee held a successful meeting on February 20, 1949 at the Biltmore Hotel, Oklahoma City. The attendance and interest of the Committee members from throughout the state evidenced their enthusiasm.

The postgraduate course in Internal Medicine, now being organized, was the subject of discussion. Qualifications of several applicants were considered inasmuch as prior to that time the Committee had been unable to obtain a satisfactory instructor. The Committee hopes to have the course in Internal Medicine well organized, an instructor engaged, and the teaching in progress by June 1, 1949.

Replies to questionnaires sent to the members of the profession throughout the state, pertaining to the subjects they wish to be taught, have been returned in large numbers. This interest and information is very helpful to the Committee in setting up its teaching program. Suggestions from individual doctors pertaining to their wishes in the post graduate programs are sought after and appreciated by the Committee.

EXAMINATION SLATED FOR BASIC SCIENCES

The following schedule has been adopted for the meeting of the Board of Examiners in the Basic Sciences, State of Oklahoma at the University Medical School Auditorium, Oklahoma City, Friday, April 15:

- Pathology—8:30 to 9:30—Dr. Turley
- Physiology—9:30 to 10:30—Dr. Orr
- Chemistry—10:30 to 11:30—Dr. Smith
- Bacteriology—1:00 to 2:00 Dr. Marsh
- Anatomy—2:00 to 3:00—Dr. Cooley

A business meeting will be held at noon.

Applications for identification number to write the above examination should be made to the Secretary of State, Capitol Building, Oklahoma City.

For additional information about the above Basic Science Examination, write Clinton Gallaher, M.D., Secretary, P. O. Box 49, Shawnee. Applicants must be fully registered and ready to start writing on the first subject at 8:30 a.m., Friday, April 15.

**THE MAYO WILL BE O. S. M. A. HEADQUARTERS
FOR THE ANNUAL MEETING**

May 16 - 17 - 18

ARNETT PHYSICIAN RECEIVES PIN, CERTIFICATE

J. P. Beam, M.D., Arnett, another pioneer in Oklahoma medicine, was presented a 50 Year Pin at a meeting of the Northwestern Counties Medical Society February 10, 1949. O. C. Newman, M.D., Shattuck, vice-councilor of that district, who will also be eligible for a 50 Year Pin in two years, made the presentation. Dr. Beam also received his Honorary Membership Certificate at that time.

Dr. Beam came to Oklahoma in 1893 and began the study of medicine in the office of his father, who was also a doctor. He was licensed by the Indian Territory Medical Board in 1898 and in 1901 was licensed in Texas.

In 1900 and 1901, he attended the Fort Worth School of Medicine and in 1905 and 1906 he attended the Bell Medical School at Dallas, Texas, receiving his diploma there May 6, 1906. In 1919 he was graduated from the Electric School of Medicine and Surgery, Kansas City, Missouri.

Recalling his many years of medical practice Dr. Beam remarked several months ago, "I have gone the hard way, made my calls on horseback before automobile days and would go at any hour of the day or night, money or no money. I have delivered over a thousand babies and to this day, although I am 79 years of age and retired, if I am needed, I will gladly offer my services."

Dr. Beam was County Health Superintendent of Ellis County for 22 years and was Selective Service Examiner of Ellis County.

Dr. and Mrs. Beam have two sons, one is now a veterinary at Arnett.

ANESTHESIOLOGY COURSES TO BE HELD IN STATE

The Department of Anesthesia of the University Hospitals, Oklahoma City, and the Oklahoma Society of Anesthesiologists announce the establishment of an informal postgraduate training program for physicians who administer anesthetics on a part time basis. There will be no formal classes. The individual physician will be given clinical instruction in any and all special techniques in which he is interested, with sidelights on premedication, the treatment of complications, related physiology and pharmacology and any other pertinent subject.

This course will be conducted in two centers, Tulsa and Oklahoma City. The course in Tulsa will be open the year round; that in Oklahoma City will be held only during the summer months, i.e., June, July, and August, thus eliminating conflicts with the medical school teaching program.

Each center will be able to take care of two physicians at a time and for any period of time the candidate can afford to spend. An attempt will be made to arrange the schedule to suit the convenience of those physicians desiring to attend.

There is no tuition fee for this course.

Physicians interested, living in the eastern half of the state (the Tulsa area), write to H. Boyd Stewart, M.D., Director of Anesthesia, St. John's Hospital, Tulsa, Oklahoma.

Those living in the western part of Oklahoma (in the Oklahoma City area), write to Howard A. Bennett, Chairman, Department of Anesthesia, University Hospitals, Oklahoma City 4, Oklahoma, for further information and scheduling.

Below, left. T. C. Leachman, M. D., Woodward, J. P. Beam, M.D., Oakwood, and C. W. Tedrowe, M.D., Woodward, following the presentation of a 50 Year Pin to Dr. Beam. Drs. Leachman and Tedrowe have also recently received 50 Year Pins.

Below, right. O. C. Newman, M.D., Shattuck, O.S.M.A. Vice-Councilor, District, pins a 50 Year Pin on Dr. Beam.





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PRECEPTORSHIP PROGRAM TO BEGIN IN JUNE

Scheduled to begin in June, 1949, a preceptorship program for senior medical students will provide a major change in the curriculum at the University of Oklahoma School of Medicine. Official approval was given to the plan in February, 1949, by the faculty of the School of Medicine and the Board of Regents of the University of Oklahoma.

The preceptorship idea was originated by the Alumni Association of the School of Medicine. Details of the plan were worked out jointly by the Alumni Association, the State Medical Association, and the faculty of the School of Medicine. The Oklahoma plan was shaped after extensive study including a careful survey of the preceptorship program of the University of Wisconsin which has been operating successfully for over 20 years.

The purpose of the plan is to encourage medical students to consider practicing in rural areas by placing them in these areas and allowing them to observe such practice at first hand.

The fourth year of medical school has been extended to 44 weeks for this purpose. The senior class will be divided into four groups of 15 to 18 students. Each group will spend 11 weeks under the close guidance of a practicing physician in a non-metropolitan area in Oklahoma. He will assist the preceptor in most phases of daily medical practice, making hospital and home calls and seeing office patients with the preceptor. The entire program is to be educational and aims to extend and supplement training given at the Medical School. The student will receive greater knowledge of the more common illnesses as seen in general practice, and will be given personal guidance in the ethics, economics and art of medicine. Not more than half the student's time will be spent in work with hospital patients. The preceptor may recommend the appointment of associate preceptors from his community to assist in this training program. Both the preceptor and the associate preceptor will become members of the general faculty of the School of Medicine.

OKLAHOMAN TO HAVE PART IN TEXAS PROGRAM

W. K. Ishmael, M.D., Oklahoma City, President of the Oklahoma Rheumatism Association, is scheduled as one of the guest speakers at the first scientific session of the Texas Rheumatism Association. The session is set for May 2 in San Antonio.

Dr. Ishmael will speak on "Secondary Degenerative Joint Disease" and will also participate in the round table luncheon discussion of the morning papers.

The Texas association was founded and affiliated with the American Rheumatism Association during 1948 for the purpose of putting on a post-graduate program covering the general subject of arthritis and allied diseases. The program is to include subjects of interest to both the internists, orthopedic surgeons, and the general practitioners.

DO YOU KNOW?

That M. V. Stanley, M.D., Tulsa, and Mrs. Alice Reed, Vinita, were married February 6, 1949, at All Saints Episcopal Church, Miami? Dr. Stanley is a Delegate of the Tulsa County Medical Society.

CANCER SOCIETY ANNOUNCES BROCHURES

The Oklahoma Division of the American Cancer Society is sending brochures of the American Cancer Society to every doctor in the state. The first one, "The Cancer Problem," by Shields Warren, should have been received by this time.

There will be 12 more published periodically at intervals of approximately two months. They will be uniform in format and size, from 20 to 30 pages, and profusely illustrated in color. It is hoped that these will be working manuals as well as useful references to assist the general practitioner as well as the specialist in detecting cancer in its early curable stages.

The proposed series on the early recognition of carcinoma for the practicing physician are: (these will not necessarily appear in the order listed)

1. The Cancer Problem, Shields Warren, New England Deaconess Hospital, Boston, U. S. Atomic Energy Commission
2. Head and Neck, Hayes E. Martin, Memorial Hospital, New York City
3. Skin, S. William Becker, University of Chicago
4. Esophagus and Stomach, Owen H. Wangenstein, University Hospitals, Minneapolis, Minnesota
5. Large Intestine and Rectum, Thomas E. Jones, Cleveland Clinic
6. Larynx-Pharynx, Chevalier L. Jackson, Jr., Temple University
7. Thyroid, John Pemberton
8. Lung, Richard J. Overholt, Lahey Clinic, Boston
9. Breast, Cushman D. Haagensen, Presbyterian Hospital, Columbia University
10. Female Pelvic Organs, Herbert F. Traut, University of California Hospital
11. Genitourinary, Victor Marshall, Memorial Hospital, New York City
12. Soft Part Tumors, John J. Morton, Strong Memorial Hospital, University of Rochester
13. Lymphomatous Diseases, (lymphosarcoma and Hodgkin's disease), Lloyd F. Craver, Memorial Hospital, New York City.

CLASSIFIED AD

WANTED—An assistant in the general practice of medicine, leading to a partnership at the end of the first year. A doctor who has had experience in private practice preferred, but all answers will be given careful attention. Please state qualifications in first letter. Write Key B, care of the Journal.

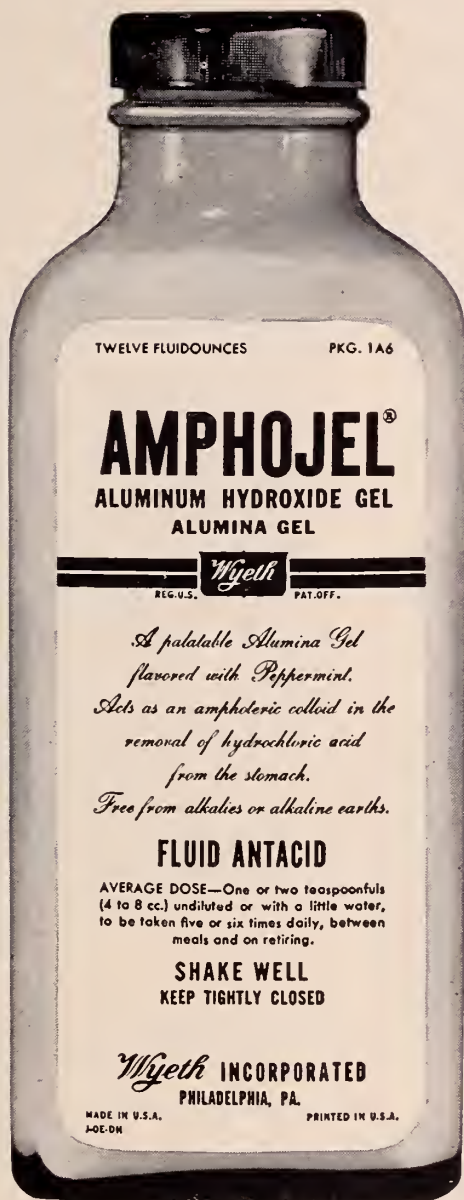


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-----IN THE MEDICAL MANAGEMENT OF PEPTIC ULCER-----

OBITUARIES

SETH PARKS, M.D.

1871-1949

Seth Parks, M.D., who had practiced medicine in Bartlesville for 36 years, died February 4 at the home of his brother, Mishawaka, Ind. Dr. Parks came to Bartlesville in 1912 and continued active in his profession until February 22, 1947, when he was stricken with paralysis.

He was a patient at a Bartlesville hospital until his brother took him to Indiana last summer. Dr. Parks had never married and his only survivor is his brother, Isaac Kane Parks.

RESOLUTION

WHEREAS, There has departed from our midst our dearly beloved President and fellow physician, Dr. Reed Wolfe; and

WHEREAS, the passing of this good man, skilled physician and highly esteemed citizen has left a vacancy in the community that can never be filled; and

WHEREAS, Dr. Wolfe unselfishly gave his life rendering services to this community, to the Indian Department and the Public Health Department of this State;

THEREFORE, BE IT RESOLVED that the Tri-County Medical Society, composed of Choctaw, McCurtain and Pushmataha counties, make this public expression of their deep sense of loss;

AND sincere sympathy of the Society be extended to the bereaved family in their sorrow;

AND that a copy of this resolution be sent to the family, to the State Medical Society, and a copy be placed on the records of our Society.

Respectfully submitted,

(Signed)

O. R. Gregg, M.D.

L. E. Gee, M.D.

Resolutions Committee

M. M. TURLINGTON, M.D.

1868-1949

M. M. Turlington, 80, pioneer Oklahoma doctor and the first resident of what is now Seminole, Oklahoma, died January, 1949 at his home after being in failing health for more than two years following an automobile accident.

Dr. Turlington was born in Alabama but moved to Texas with his family and later moved to Ada, Oklahoma. The present town of Turlington, Texas was named after him as he was its first practicing physician. Before moving to Seminole, he practiced in Tidmore, Indian Territory.

He was a member of Seminole's Masonic lodge and the First Methodist Church. Active in the Oklahoma State Medical Association, he was awarded a 50 year pin several months ago.

Survivors include the widow of the home, one son, M. M. Turlington, Jr., Seminole; a grandson, M. M. Turlington, III, New York; two brothers, John Turlington of Clovis, N. M., and Archie Turlington of Longview, Texas, and one sister, Mrs. Claudia E. Presswood of Grand Saline, Texas.

THOMAS BOYD TURNER, M.D.

1876-1949

Thomas Boyd Turner, M.D., Stigler, died recently at his home in Stigler. Funeral services were held December 20. Dr. Turner was born in Waverly, Tenn. December 28, 1876 and was graduated from Vanderbilt University School of Medicine at Nashville and came to Indian Territory in 1898.

Survivors include one daughter, one grandson and two sisters.

MARSHALL M. WEIR, M.D.

1873-1949

Marshall W. Weir, M.D., Oklahoma City, died February 5, 1949 in Oklahoma City.

Dr. Weir was born September 3, 1873, at Belleville, Ill., and was graduated from the University of Missouri in 1906. He was in general practice in Oklahoma.

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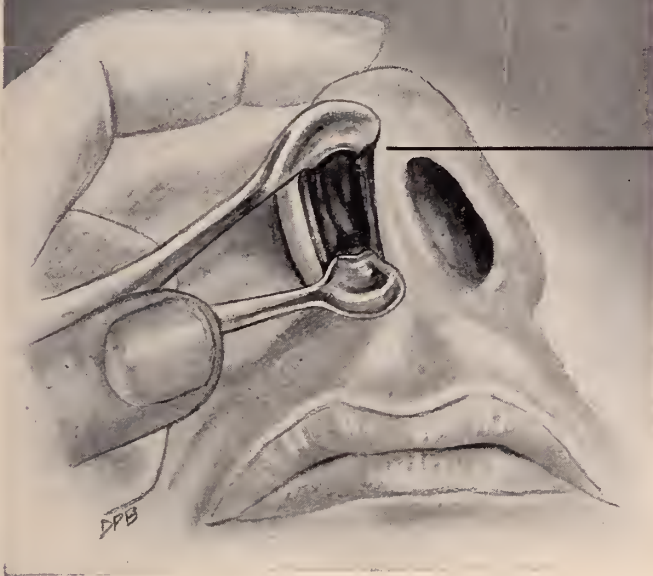
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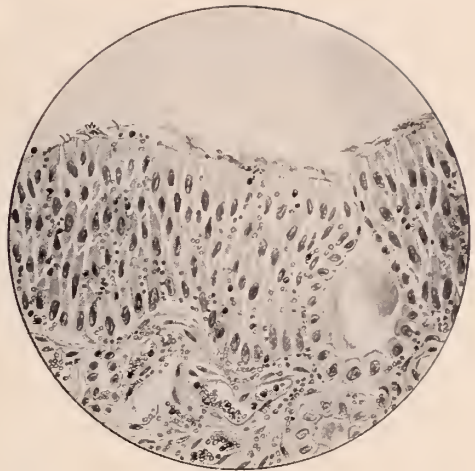
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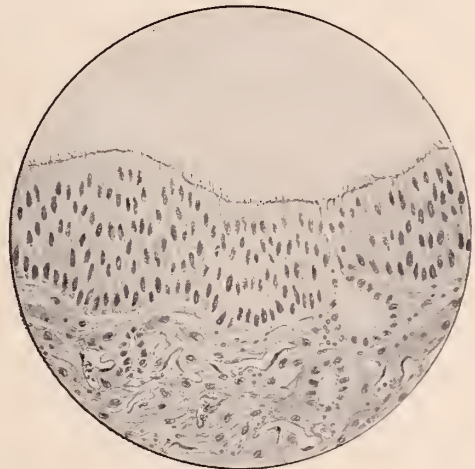
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Nasal membrane showing increased leukocytes with denudation of cilia.

Normal appearing nasal epithelium.



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HAVE YOU HEARD?

Charles Green, M.D., Lawton, spoke on the rh blood factor when the Oklahoma Nurses Association district eleven met at Fort Sill.

G. L. Berry, M.D., Lawton, recently had a feature section in his home town paper devoted to him and his hobby, horticulture.

A. W. Hoyt, M.D., Chickasha, spoke on "What's New in Health Programs" at the Matrix club in that city.

David Fried, M.D., has recently moved to Mangum from Blackwell and will open a clinic there.

Leslie T. Hamm, M.D., Lawton, was principal speaker at the Cameron college YW-YMCA meeting on "Sex Problems of Young People."

Charles Tefertiller, M.D., Altus, addressed the Business and Professional Women's club on Blue Cross.

Robert C. Feamster, M.D., formerly of New Orleans, has joined the McAlester clinic and will specialize in eye, ear, nose and throat.

C. Riley Strong, M.D., El Reno, was appointed to the board of directors of the chamber of commerce of that city.

Corliss Kepler, M.D., Woodward, has completed three weeks of postgraduate work in pediatrics at Chicago.

J. V. Hyer, M.D., Garber, told the Rotary club members of that city that the biggest problem in getting adequate assistance to children who are not normal physically results from a lack of understanding the state program for aiding crippled children.

Roscoe Walker, M.D., Pawhuska, was re-elected to the board of the Osage Packing Company.

Walter Hardy, M.D., Ardmore, was presented with a medal and lapel pin by the department of the interior for 30 years of continuous, devoted service. Dr. Hardy served as physician for Carter seminary from 1916 to 1946.

Charles Ohl, M.D., Chickasha, was guest speaker on "Health and Medicine" at a meeting of the Chickasha Sorosis club.

Morris Smith, M.D., Guymon, was elected president of the newly organized Guymon Trap and Gun Club.

G. G. Downing, M.D., Lawton, has joined the staff of the Kiowa hospital as consulting surgeon.

Paul Williamson, M.D., a 1946 graduate of the University of Oklahoma School of Medicine, is now associated with Roscoe Walker, M.D., Pawhuska.

Fred Patterson, Jr., M.D., Duncan, was one of the speakers on the various aspects of socialized medicine at a meeting of county doctors, pharmacists, dentists, technicians, nurses and allied professions.

C. E. Northeutt, M.D., O.S.M.A. President, attended the formal ground breaking ceremonies for the new \$170,000 municipal hospital at Fairfax.

M. S. White, M.D., is the new city physician of Blackwell.

J. H. Goldberger, M.D., El Reno, spoke to a regular Lions club meeting of that city on Socialized Medicine.

Earl D. McBride, M.D., Oklahoma City, has been selected by the war department to tour army hospitals in Japan with a group of other orthopedic specialists. The 35 day tour will begin in May.

MEDICAL SCHOOL NOTES

The annual LeRoy Long Memorial Lecture was delivered at the University of Oklahoma School of Medicine in February, 1949, by Dr. Hans Selye, Director of the Institute of Experimental Medicine and Surgery at the University of Montreal. Dr. Selye's subject was "The Adaptation Syndrome."

The LeRoy Long lecture is sponsored by Phi Beta Pi medical fraternity, and is a memorial to the late Dr. LeRoy Long who was dean of the Medical School and Professor of Surgery from 1915 to 1931.

Dr. Walter Joel began his duties as Assistant Professor of Pathology on February 15, 1949. Dr. Joel comes to the School of Medicine from Alexandria, Egypt, where he was director of laboratories of the Jewish Hospital and the Italian Hospital from 1933 to 1948. He was director of the pathological laboratories

of the St. Cecilian Hospitals in Berlin from 1929 to 1933. His major research interests have been cancer and hematology. He received his medical education from the University of Strasburg, University of Muenster, University of Freiburg and University of Cologne.

The February, 1949, issue of "El Hospital" contained an article by Paul H. Fesler, consultant to the Dean of the School of Medicine. Mr. Fesler's article is a reprint of a paper he presented at a clinical congress of the American College of Surgeons. The paper discusses the importance of good food service and dietary management not only to the patient, but also to the hospital personnel who eat at the hospital.

"El Hospital" is a Spanish language journal for Central and South American hospital administration which is devoted to articles concerning hospital administration.



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MEDICAL SOCIETIES AROUND THE STATE

CARTER COUNTY

A committee was appointed to study the establishment of a blood bank for Carter county at a February meeting of that county society. Those on the committee are F. W. Boadway, M.D., Chairman, C. A. Johnson, M.D., and Thornton Kell, M.D.

Members of the Society entertained the Carter County Auxiliary with a dinner February 10.

NORTHWESTERN COUNTY

The Northwestern Counties Medical Society met February 10 at Memorial Hospital, Woodward, with 21 of the 25 members present. A fifty year pin and honorary membership certificate were presented to J. P. Beam, M.D., Oakwood (see picture elsewhere in the Journal) by O. C. Newman, M.D., Shattuck, vice-councilor of the district.

Mrs. W. R. Cheatwood, Duncan, spoke on the Compulsory Health Program. The Society decided that each county unit would sponsor an essay contest on "Why the Practice of Medicine Furnishes this County With the Finest Medical Care," advocated by the Association of American Physicians and Surgeons.

C. E. Williams, who had just returned from Los Angeles postgraduate course on EENT gave a transcription of a lecture on hemorrhage in nose and throat work.

TULSA COUNTY

Two outstanding programs were slated for the Tulsa County Society in February. February 14, Maxwell A. Johnson, M.D., urologist, discussed "Diagnosis and Treatment of Carcinoma of the Bladder" and Feb. 21 Warren O. Nelson, M.D., endocrinologist and professor of anatomy at State University of Iowa College of Medicine, spoke on "Testicular Disfunction." Tulsa County Society programs begin at 8:00 p.m. at the Mayo Hotel, Tulsa.

OKLAHOMA COUNTY

The Oklahoma County Medical Society met at the Oklahoma Club February 22 for a buffet supper. The scientific program was on "The Clinical Use of Sex Hormones" by Willard O. Thompson, M.D., clinical professor of medicine, University of Illinois College of Medicine, Chicago, Illinois, and "The Use and Abuse of Thyroid," E. Kost Shelton, M.D., associate professor of medicine, University of Southern California, Los Angeles.

POTTAWATOMIE COUNTY

At the meeting held during February of the Pottawatomie County Medical Society, "The Use and Abuse of Estrogens" was the topic of G. G. Birdsong's, M.D., program with the discussion by J. W. Baxter, M.D.

MUSKOGEE-SEQUOYAH-WAGONER

Raymond F. Barnes, M.D., administrator of the medical and health services of the midwestern area American Red Cross, spoke on "Intpretation of the American Red Cross Blood Program" at a Tri-County Medical Society meeting.

CLEVELAND COUNTY

Speaking on "Surgery of the Autonomic Nervous System of the Peripheral Vascular Disease," J. P. Wolff, M.D., Oklahoma City, was guest speaker at a meeting of the Cleveland County Medical Society.

KAY-NOBLE

Physicians from the surrounding area were invited to the Kay-Noble Society meeting when Clyde E. Muchmore, editor of the Ponca City News, spoke at a county society meeting on "The Patient Looks at the Doctor."

KIOWA-WASHITA

Gordon Livingston, M.D., spoke on obstetrics at the Kiwo-Washita County Medical Society recently.

ANNOUNCEMENTS

OKLAHOMA STATE MEDICAL ASSOCIATION. Annual Meeting May 16, 17, and 18, Mayo Hotel, Tulsa, Oklahoma. House of Delegates meeting Sunday, May 15.

OKLAHOMA UNIVERSITY MEDICAL SCHOOL ALUMNI ASSOCIATION. Annual Banquet, Ivory Room, Mayo Hotel, Tulsa, Oklahoma, May 16, 6:30 p.m. For further information write Lee K. Emenhiser, M.D., 1207 Medical Arts Building, Oklahoma City 2, Oklahoma.

TEXAS RHEUMATISM ASSOCIATION. First scientific session, May 2, San Antonio, Texas, 8:30 a.m. to 12:30 p.m. For additional information write Howard C. Coggeshall, M.D., President, Texas Rheumatism Association, 3701 Maple Avenue, Dallas 4, Texas.

AMERICAN MEDICAL ASSOCIATION. Annual session, June 6-10, Atlantic City, New Jersey.

SOUTHWEST ALLERGY FORUM. April 4 and 5, El Paso.

BOARD OF EXAMINERS IN THE BASIC SCIENCES. University Medical School Auditorium, Oklahoma City, April 15. Apply to the Secretary of State, Capitol Building, Oklahoma City for identification number. For additional information write Clinton Gallaher, M.D., Secretary, P.O. Box 49, Shawnee.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, INC. General oral and pathology examinations (Part III), Chicago, May 8 through May 14. Hotel Shoreland in Chicago will be headquarters. Candidates for reexamination in Part II must make written application to the Secretary's office not later than April 1, 1949. Applications are now being received for the 1950 examination at the American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pa.

INTERNATIONAL CONGRESS ON RHEUMATIC DISEASES. Waldorf Astoria, New York City, May 30—June 3. Official languages will be English, French and Spanish with immediate translations made by means of I.B.M. wireless system.

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BOOK REVIEWS

HANDBOOK OF ORTHOPAEDIC SURGERY. Alford Rives Shands. St. Louis, C. V. Mosby Company, 1948. 500 pages. Price \$6.00.

This is the third edition of this excellent handbook covering the entire field of orthopaedic surgery. To those familiar with the previous edition it may be said that the material is thoroughly reviewed and modified to conform with more recent concepts of the various divisions of orthopaedic surgery, but is in general very similar to the material contained in the first and second edition. To those not familiar with the previous editions of this book, it may be recommended highly for the purpose which this title would imply; namely, the Hand Book of Orthopaedic Surgery. The whole field is covered adequately and in a sufficiently general way so that it is especially valuable for use by students of medicine and by the busy general practitioner who does not care for an exhaustive study of the orthopaedic subject matter, but rather for a brief reminder of various possibilities, and for suggestions for treatment. The author again has had collaboration and help from many eminent orthopaedic surgeons and the material obtained in the book is that generally accepted by orthopaedic surgeons, making allowances for certain difference of opinion which are bound to develop in any profession.

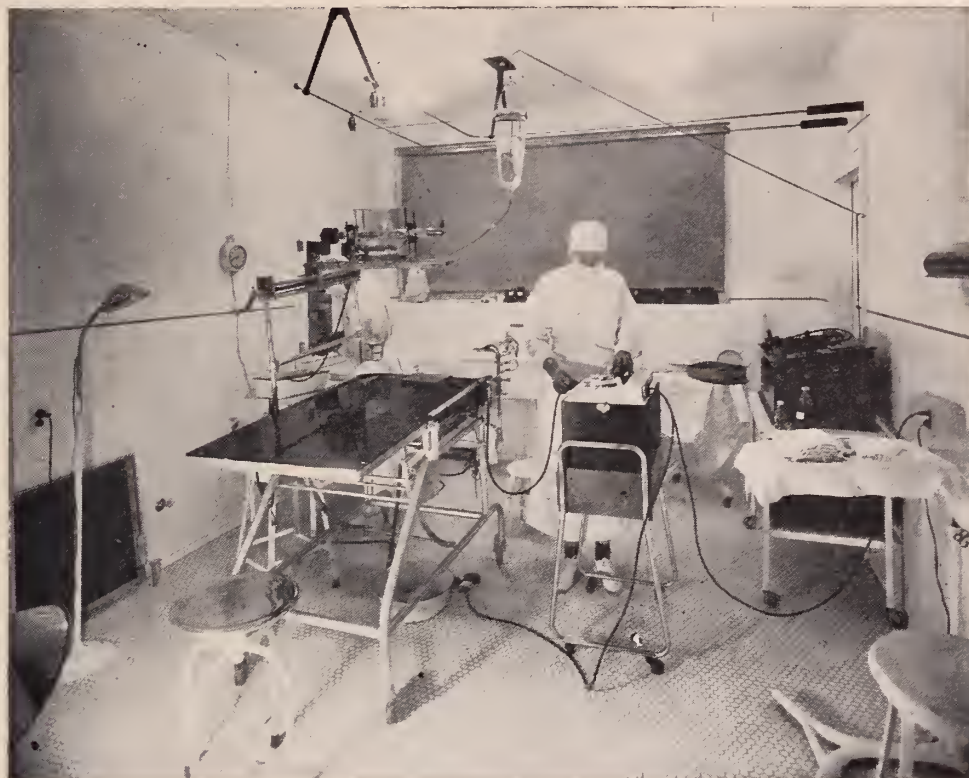
The second, third, and fourth chapters deal with congenital deformities, together with affections of growing bone and give a very brief resumé of the various situations in these fields. Certain sections I believe are worthy of special mention; as for example, a rather brief chapter on infantile paralysis. A very rational point of view is taken of this rather controversial subject and many sensible suggestions given. The section on bone tumor very briefly but adequately describes the various tumors of bone and offers a reminder of the various types of tumors which may occur in the skeleton.

In the section on fractures the reader must not look for any detailed discourse on the treatment of acute fractures. This section is confined entirely to treatment of deformities and poor results obtained in the treatment of fractures; and as such, is of extreme value in reminding us of the dangers inherent in certain types of fractures.

Two chapters on the spine are, also, well worthy of reading. They call attention to the various clinical findings consistent with different diagnoses of pain in the low back. There is a brief discussion of that very popular diagnosis "ruptured intervertebral disc" which is well balanced and hence of value to the general practitioner.

The format of the book is a distinct improvement over the previous edition, both in organization of material and in typography. The paper has been improved and the print is much clearer than in previous editions. The size of the book has been somewhat reduced which again makes it more readily available for instant reference for the busy practitioner. I have no hesitation in recommending purchase of this 500 page book with purchase price of \$6.00, which makes it a good investment for students and practitioners alike.

—Don H. O'Donoghue, M.D.



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| COUNTY | PRESIDENT | SECRETARY | MEETING TIME |
|---------------------------------------|---|----------------------------------|----------------------------------|
| Alfalfa..... | G. G. Harris, Helena | C. E. Cook, Jr., Cherokee | Last Tues. each Second Month |
| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | W. W. Cotton, Atoka | |
| Beckham..... | H. K. Speed, Sayre | E. S. Kilpatrick, Elk City | Second Tuesday Third Thursday |
| Blaine..... | W. F. Bohlman, Watonga | Edward T. Cook, Jr., Anadarko | Third Thursday |
| Caddo..... | C. R. Waterbury, Apache | Jack W. Myers, El Reno | Subject to Call |
| Canadian..... | J. N. Goldberger, El Reno | Royce Means, Ardmore | Second Tuesday |
| Carter..... | Roger Reid, Ardmore | R. K. McIntosh, Jr., Tahlequah | First Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | | |
| Choctaw-McCurtain- Pushmataha..... | L. E. Gee, Broken Bow | H. D. Wolfe, Hugo | |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Fourth Thursday |
| Comanche..... | Walter Wicker, Lawton | Charles Green, Lawton | Second Tuesday |
| Cotton..... | A. B. Holstad, Temple | Mollie Scism, Walters | Third Friday |
| Craig..... | P. M. McMillan, Vinita | D. H. Olson, Vinita | |
| Creek..... | Frank H. Sisler, Jr., Bristow | Carl W. Bowie, Bristow | Second Tuesday |
| Custer..... | J. G. Wood, Weatherford | Floyd Simon, Clinton | Third Thursday |
| Garfield..... | Byron J. Cordonier, Enid | | Fourth Thursday |
| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | |
| Greer..... | Van S. Parmey, Mangum | J. B. Hollis, Mangum | First Wednesday |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | |
| Haskell..... | William S. Carson, Keota | N. K. Williams, McCurtain | First Friday |
| Hughes..... | Hartzell Schaff, Holdenville | Paul Kernek, Holdenville | Last Monday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Second Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Thursday |
| Kay-Noble..... | D. M. Gordon, Ponca City | C. W. Arrendell, Ponca City | |
| Kingfisher..... | H. Violet Sturgeon, Hennessey | Henry C. Trzaska, Hennessey | |
| Kiowa..... | A. H. Bungardt, Cordell | Aubrey E. Stowers, Sentinel | |
| LeFlore..... | Charles Cunningham, Poteau | G. W. Hogaboom, Heavener | |
| Lincoln..... | U. E. Nickell, Davenport | Ross P. Demos, Stroud | First Wednesday |
| Logan..... | Webber Merrell, Guthrie | Phillips R. Fife, Guthrie | Third Tuesday |
| Mayes..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | Ralph Royster, Purcell | W. C. McCurdy, Jr., Purcell | |
| McIntosh..... | F. R. First, Jr., Checotah | W. A. Tolleson, Eufaula | Third Thursday |
| Muskogee-Sequoyah- Wagoner..... | L. S. McAlester, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
| Northwestern..... | R. G. Obermiller, Woodward | C. W. Tedrowe, Woodward | 2nd Thurs. Even Mo. |
| Okfuskee..... | A. S. Melton, Okemah | M. L. Whitney, Okemah | |
| Oklahoma..... | Onis George Hazel, Oklahoma City | Gerald Bednar, Oklahoma City | Fourth Tuesday |
| | | Mrs. Muriel Waller, Exec. Secty. | |
| Okmulgee..... | G. Y. McKinney, Henryetta | S. B. Leslie, Jr., Okmulgee | Second Monday |
| Osage..... | G. W. McDonald, Pawhuska | S. S. Stotts, Pawhuska | Third Thursday |
| Ottawa..... | Rex Graham, Miami | W. Jackson Sayles, Miami | Second Thursday |
| Payne-Pawnee..... | Howard Puckett, Stillwater | C. M. Rippy, Stillwater | Third Friday |
| Pittsburg..... | G. R. Booth, Wilburton | Homer C. Wheeler, McAlester | First Wednesday |
| Pontotoc-Murray..... | E. M. Gullatt, Ada | Ollie McBride, Ada | 1st and 3rd Wed. |
| Pottawatomie..... | J. N. Owens, Jr., Shawnee | F. C. Gallaher, Shawnee | Third Wednesday |
| Rogers..... | Roy Melinder, Claremore | P. S. Anderson, Claremore | |
| Seminole..... | J. D. McGovern, Wewoka | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Stephens..... | A. J. Weedn, Duncan | W. R. Cheatwood, Duncan | Third Wednesday |
| Texas..... | | E. L. Buford, Guymon | |
| Tillman..... | F. P. Fry, Frederick | G. A. Tallant, Frederick | Second and Fourth Monday |
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| Woods..... | John F. Simon, Alva | Aubrey E. Stowers, Sentinel | Last Tuesday |
| | | W. F. LaFon, Alva | Odd Months |

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne, Major—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

CONFESSIO

It's time to confess, repent and reform. Physicians are not inspiring confidence, love and respect as of old. Yes, time has brought many changes but human nature clings to the flesh. Medical science has marched on and young physicians in pursuit of disease, in their enthusiasm, may forget the patient. In this country material prosperity has tempted some physicians in cold calculation, to employ life giving science for the purpose of taking unwarranted gains.

In this difficult time when all good Americans are rapidly losing hard won liberties, it is embarrassing to hear honest, level-headed people say, "I don't want socialized medicine but it looks like we may have it. If we do, it will be largely because the doctors do not find some way to take care of the poor and the unfortunate people in moderate circumstances who must meet the costs of long continued illness." Or some may say bluntly, "If socialized medicine does come, it will be doctors fault." If the question is pursued, the person making such a statement may cite examples of trying hardships because of medical, surgical and hospital costs, or he may cite examples of what he considers exorbitant charges for medical or surgical services.

It is difficult to answer such charges because all good doctors know of irrefutable examples justifying such charges. Though they represent the exceptional cases, at the same time they threaten the good name of the profession. All physicians suffer because of the few who for personal gain are willing to pilfer the pockets of the sick and penalize their profession. Organized medicine should see that the guilty are severely punished unless they are willing to repent and reform. It is astonishing how many pathetic stories of hardships come through the office of the State Medical Association because of professional fees, with or without charges against the doctors. The list, if published, though not a large one, would come as a great surprise and create general

embarrassment as well as some specific chagrin.

Fortunately, the great majority of physicians are sympathetic with the sick and glad to help the poor. Yet the few who would get rich quick regardless of public opinion, and the occasional black sheep who is unscrupulous, make it very hard for those who are trying to hold up the traditions of a great cause, and their actions make it exceedingly difficult to successfully defend the profession against the threat of compulsory health insurance. It may become necessary for the medical profession to accept the general embarrassment in order to punish the designing minority who through their inhumanity to man are bringing disgrace upon their profession.

Should the County Medical Society clean house? Should the State Association publish complaints and name names?

We wonder what has become of the code of Hammurabi, the Hippocratic oath, the Prayer of Maimonides, the Ethics of Percival, the sermons of John Brown and Oliver Wendell Holmes, A.M.A.'s Principles of Medical Ethics and the new version of the Hippocratic oath adopted by the World Medical Association at its first Assembly in Paris, which contains these words, "I will practice medicine with conscience and dignity. The health and life of my patient will be my first consideration."

When physicians fail to come nearer than other men to the solution of humanity's needs, they move toward the infamy that marked the ruin of Hitler's socialized medical men.

A DOCTOR OF THE OLD SCHOOL

In this issue of The Journal an editorial under the above title is being reproduced in full. This outstanding tribute to the medical profession appeared in the Daily Oklahoman, March 29, 1949.

It was written by Miss Edith Johnson, a long time friend of the people as evidenced by her untiring support of medicine as a free enterprise.

THE A.M.A. NATIONAL EDUCATIONAL CAMPAIGN

Long before this writing goes to press this campaign will be well under way. An advance copy of the A.M.A. "first general form speech" has reached our desk. This manuscript presents the essential arguments upon which the salvation of the people's health and the preservation of our profession as a free enterprise must rest. It is gratifying to note that the opening paragraph is in line with our own oft repeated policy, that the issue is American freedom. What happens to 150,000 physicians is insignificant when compared to the vital interests of 150,000,000 people. Sans freedom, nothing that we hold sacred can be safe.

The succeeding paragraphs are representative of the policies enunciated in this Journal's editorial columns throughout the years. Oklahoma has long awaited national alarm and concerted action.

Though this campaign represents a belated effort to inform the people, every physician must participate in the shame and shoulder his share of the eminently worthy cause now so assiduously sponsored by the American Medical Association.

Now is the time for every member of the State Medical Association to resolve, "in spite of the world, the flesh, and the devil, to be a wise man."

THE DOCTOR

The reproduction of *The Doctor* by Luke Fildes which heads up the American Medical Association's educational campaign is truly representative of the traditional spirit of medical service. Every physician should know that the portrait of *The Doctor* really represents the features of Dr. James Clark (later Sir James) one of the world's good Samaritans.

When John Keats was alone in the Piazza Spagna in Rome wasting on his deathbed with only his friend Severn to comfort him, Dr. Clark discovered his plight and gave sympathetic care to the end. No doubt this unfailing spirit of medicine led Luke Fildes to immortalize the face of this kind physician. People who pass before the original in the British Museum often pause to pray and wipe the tears away.

In this famous picture we find the truest melodies, moods and memories of medicine. Sir Walter Scott recalled having experienced a similar appeal when he was a lad 15 years of age. He saw Robert Burns, with a

group of literary friends, "shedding tears over a print representing a soldier lying dead in the snow, his dog sitting in misery on one side, on the other side, his widow with a child in her arms."

The medical profession has the first claim on the appeal of sickness and suffering yet it has long been the politicians shiboleth and it is now being employed as a medium through which they seek to destroy the sacred freedom of the patient-doctor relationship for the sake of political power.

FAITH, HOPE, CHARITY, SCIENCE

Above the tomb of Pasteur these words appear. Let us hope they may endure. In these dark days they brighten the golden thread of truth which has run continuously throughout the ages. Regardless of what happens, truth will prevail. Though the President of the United States and his confederates in the cause of compulsory health insurance play politics with science, which is so vital to the nation, they may some day awaken to the truth of Pasteur's statement, "What really leads us forward is a few scientific discoveries and their application," and that "... science is the soul of the prosperity of nations and the living source of all progress."

The leveling influence of socialized medicine minimizes the possibility of even "a few scientific discoveries." It is hoped that the proponents of socialized medicine who have reached a good age under medicine as a free enterprise may live to share the retribution which is sure to follow their proposed health program in case it is adopted. A full realization of their plans will materially lessen their chances to live to a ripe old age.

For the sake of future generations, the medical profession must keep up the fight for science with faith, hope and charity. Now is a good time to request patients to write the President and their representatives that they believe with Lincoln, the friend of the common people everywhere, "In all that the people can do as well for themselves the government ought not to interfere." Beloved of all races, Lincoln never extended lend lease or food to other nations; he gave only faith, hope and charity and he lives forever. Present day bureaucrats cannot buy their way to immortality; not even by giving so-called free medical care at double the cost of better medical care individually negotiated by the patient and his physician.

A BITTER STRUGGLE

Kiplinger Magazine, February, 1949, says a bitter struggle is shaping up over Truman's health program. It is claimed if the program works medicine will be given the same public consideration that education now receives. "If it proves a flop, the quality of medical care may be lowered — a possibility feared by many doctors.

"Essentially, the long-range program would do four things:

"Increase by one-fifth the number of doctors and health workers. This would be done by federal aid to medical schools.

"Step up construction of hospitals.

"Promote medical research.

"Revolutionize the present way of paying medical bills by setting up a system of national health insurance."

The government's acceleration of medical education set the medical schools back a quarter of a century. The schools could use more money but it can do only harm if it comes through government subsidy with the usual power to control. The construction of hospitals with government aid has been very disappointing. Good construction contractors hate the red tape, the inspectors and to add about 20 per cent to the ordinary costs to take care of the handicaps and delays occasioned by government participation. Those who have built on their own have fared better as a rule and they own what they have built.

Government funds for research without control would be fine. But the sleepless, critical spirit of scientific research is foreign to the government way of doing things. Bacteria, viruses, allergens and cancer cells know nothing about an eight hour day, five day a week program with weekends on their hands.

The new way of paying doctors as discussed in these columns will not interest American physicians and will insult their competent thinking patients. Government leave medicine alone or prepare for the consequences. Other nations have paid the price.

The bills seem not to come due until after general socialization gathers about socialized medicine which seems to serve as a nucleus for complete subjugation.

THE TRUTH SHALL MAKE US FREE

In this issue of the Journal, the documented story *Doctors of Infamy* is reviewed. The book contains accounts of crime which would make everybody in your state office blush with shame. Even the review does not reveal the true content of the volume. The readers of the Journal who purchase the book should have an asbestos case in which to keep it. The mere perusal of the heinous crimes perpetrated upon human beings at the behest of Reich leader S. S. Himmler makes the blood of civilized people boil and puts savage cruelty to shame. Surely, it will require an elevator to get the perpetrator up to hell.

Since we are threatened with controls equally as exacting as those that came to Germany following the Bismarckian era, we should be looking ahead and girding our loins against the continued loss of our liberties.

There is a diagram in the book illustrative of medical submission with Hitler at the head of all categories. The time may come when we would have only to blot out Hitler with the stamp of Ewing. Put this thought in your pipe and see what the smoke smells like.

A LIFE GIVING SERVICE

In an early issue of The Journal the reader will discover the obituary of Dr. Edward P. Allen whose ten thousand babies and ten hundred students and associates perpetuate his life and carry his spirit of service far beyond the bounds of his physical existence and the chronological span of his exemplary life.

No matter what happens to the medical profession such contributions to human weal through scientific skill and studied compassion can never die.

GOING TO THE A.M.A.?

June 6-10

Atlantic City

A.M.A. Members who are NOT Fellows will be admitted to the General, Scientific and other meetings at the convention. They may not take part in any of the official proceedings, however.

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SCIENTIFIC ARTICLES

INDUCTION OF LABOR*

JACK W. BAXTER, M.D.
SHAWNEE, OKLAHOMA

Although the induction of labor has been termed by many as "meddlesome midwifery," it is my opinion that it has a place in the practice of obstetrics. I advocate the artificial rupture of membranes to induce labor, for not only is medical induction usually unsuccessful, but it is also dangerous to the mother or baby or both. The value of castor oil is doubtful and it is extremely unpleasant to the patient. Quinine is not without danger, for deafness, following its administration, has been demonstrated. Obstetrical pituitrin is dangerous due to tetanic contractions that may occur, and has no part in the induction of labor, as far as I am concerned. Bags, bougies, packs, or rectal tubes are not used because the incidence of morbidity is high.

The cases to have induction should be selected. These well known, important conditions should be emphasized. 1. The baby should be mature. 2. It is important that the cervix be "ripe." By this is meant a well effaced cervix, dilated or dilatable, and the head relatively low, so that prolapse of the cord is unlikely. The head must not be floating or ballotable. 3. There should be no cephalo-pelvic disproportion or malpresentation. In a primipara, one can judge the estimated date of confinement by the thin cervix. A long uneffaced cervix is not a cervix of pregnancy at term. If the cases are selected carefully, bearing the above conditions in mind, induction of labor by artificial rupture of membranes is highly successful.

INDICATIONS—There are at least two classifications where rupture of the membranes is desirable. One is where the patient is at term and the cervix is "ripe," and the first signs of beginning toxemia

have appeared; that is, the diastolic pressure is 90 or above and/or there are urinary changes that indicate a toxemia is at hand. The other instance is where the patient is a non-resident and must travel several miles to the hospital for delivery, especially if the patient is a multipara or a short labor is expected. It is well known that the percentage of patients from rural districts is increasing. This is due to several reasons. Women now demand that their labor be conducted under analgesic medications in modern hospitals. They can remember a previous pregnancy in the home or country hospital where their care during labor and delivery was not desirable. Doctors in smaller communities are becoming almost extinct. Many patients desire to return to the obstetrician who successfully attended a previous pregnancy. Better economic conditions and improved transportation facilities are other factors that govern the increasing number of patients from remote villages.

For multiparas, with a history of a short labor previously, to remain at home until labor begins is hazardous. They are often deprived of analgesia and many times they have a precipitant delivery enroute to the hospital. Transportation also must be available immediately after the onset of labor pains, and sometimes this is not possible.

If the patient could establish residency near the hospital at the expected date of confinement, their problems would be solved. This is not always possible because a woman cannot leave her home for an indefinite period if she has other children for which to make arrangements. Also some women will be on a diet that they will be unable to follow in a hotel. This also means quite an additional expense to the patient.

TECHNIQUE—When a patient is admitted to the hospital for artificial rupture of the membranes, she is received without

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948.

haste and confusion, for she is expected. She is given a very thorough perineal preparation and a hot soapsuds enema. Many times the hot enema will initiate uterine contractions or the membranes will rupture spontaneously. With careful asepsis, the index finger of the left hand is placed in the cervical canal and the membranes are stripped away from the internal os. The amniotome, or other instrument to be used, is pushed along the finger until it reaches the membranes which are usually bulging from the external os after having been stripped. The membranes are ruptured and as much amniotic fluid is allowed to drain as possible and a sterile pad is applied to the vulva and changed frequently. If the membranes are not ruptured on first attempt, the effort, by vagina, is abandoned for it is not safe to reintroduce an examining finger into the vagina. The guiding finger can be placed in the rectum, however, and another attempt made.

RESULTS—An analysis of 100 consecutive cases of induction of labor, by rupturing the membranes, reveals that labor began in every case from thirty (30) minutes to 12 hours, the average being two and one half hours in the primipara and one hour in the multipara. The length of labor in primi-

para ranged from four hours to 10 hours, the average being eight hours. The multipara patient had an average length of labor of four hours. This is quite a reduction in the labor time from normal. There was no fetal or maternal mortality. In only two cases did the temperature of the mother reach 100.4 degrees and it did not remain that high for more than 36 hours. In this small series of cases, we found only a two per cent morbidity compared to our usual evidence of morbidity of about five per cent. In no instance was it necessary to use medication to start contractions.

I think that we should observe carefully the results of obstetricians who are now using rupture of membranes to induce labor either electively or for medical reasons. The stigma founded by our forefathers, "that nature should take its course," has been partly laid aside, for now analgesia without harm to the mother or baby is generally practiced. It was only a few years ago that medication to control pain during labor was not given. Now, with the advancement of obstetrics to the point where the mother is allowed to get on her feet from one to three days post partum, it might behoove us to be a little less critical and more attentive to the induction of labor.

THE ROLE OF THE CERVICAL SYMPATHETICS IN THE TREATMENT OF PAIN*

AVERILL STOWELL, M.D.

Interruption of sympathetic impulses by surgery or procaine blocks has had increasing importance in the field of medicine. As Dr. Felix Park has emphasized, lumbo-dorsal sympathectomy in the treatment of early malignant hypertension and in chronic essential hypertension where kidney involvement is minimal, has been utilized in some instances. Although sympathetic surgery is far from the answer to the problem of hypertension, it has a definite role. Our presentation today will be confined to a few remarks on the treatment of specific types of pain.

During the last 50 years sporadic reports have indicated that interruption of impulses

passing over the sympathetic nervous system will favorably alter painful syndromes. This paper will present our results in 100 cases in which cervical sympathetic ganglionectomy or procaine infiltration of the cervical sympathetic chain was carried out. We have divided this presentation into three main headings, (1) unilateral headache and painful syndromes of the face, (2) upper extremity pain, (3) diffuse pain.

The surgical indications and procedures have been altered since Royle^{1, 2} resected the rami to the cervicothoracic outflow in 1924 for cerebral spasticity. Different methods of interruption of the upper portion of the sympathetic chain by procaine blocks have been reported. After trying the posterior approach in the thoracic paravertebral region and the anterior transpleural approach

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

to the stellate ganglion, we adopted the technique of de Pereira³. This method of injection anteriorly at the level of the sixth cervical transverse process avoids the pleural dome and does away with the relatively frequent occurrence of pneumothorax and pleural shock. The procedure is technically easy, and to date in over 550 blocks there have been no complications except hoarseness due to involvement of the recurrent laryngeal nerve. In cases where more lasting interruption of sympathetic impulses was desirable the stellate or superior cervical ganglia were removed. At the present time we are removing the lower two-thirds of the superior cervical ganglion with 4 cm. of the caudad portion of the sympathetic chain as well as performing a periarterial sympathectomy of the carotid artery. The sympathetic chain is identified medial to the vagus nerve and behind the carotid artery and, dissecting upward, the superior cervical ganglion is found approximately 2 cm. above the carotid bifurcation. As many rami as possible to the upper portion of the ganglia are severed.

UNILATERAL HEADACHE AND FACIAL PAIN

The multiple mechanisms concerned in the production of pain in the head have been clarified by observations made in recent years by the neurologist and neurosurgeon. Headache, as Ray and Wolff⁴ have pointed out, may arise from traction on the veins that pass to the venous sinuses from the surface of the brain, traction on the middle meningeal, large intracranial arteries or the arteries at the base of the brain, inflammation of or pressure on the tentorium on the dura which covers the base of the skull, on the cranial or cervical nerves, or on the vascular network. In the great majority of headaches of the chronic, recurring type, it seems most likely that distention or constriction of a portion of the arterial tree is primarily responsible for the pain.

Unilateral headache was first relieved by interruption of sympathetic impulses by Jonnesco⁵ in 1923. He performed a cervical sympathectomy for migraine. Hellwig⁶ in 1924 reported good results from periarterial sympathectomy on the carotid artery in cases of migraine. Dandy⁷ (1931), Craig⁸ (1935), Love and Adson⁹ (1936) and Rowbotham (1942,¹⁰ 1946¹¹) reported beneficial results in 19 cases of migraine headache, while five cases failed to obtain relief by sympathectomy. Our results in three cases of typical migraine headache indicate that

procaine block of the cervical chain on the homolateral side would immediately relieve the pain, while in one case only partial relief was experienced. In unilateral frontotemporal headache of short duration (histamine cephalgia of Horton,¹² petrosal neuralgia of Gardner, Stowell and Dutlinger¹³) associated with tearing, conjunctival injection and nasal obstruction, cervical sympathetic blocks have been of great benefit in interrupting the cycle of headaches. These headaches, although relatively uncommon, are interesting in that they occur at regular times, may awaken the patient from a sound sleep and, sadly enough, are usually precipitated by the intake of an ounce of whiskey.

A typical case was that of a 42-year old white male referred by Dr. Glass of Tulsa, who was seen in the Department of Neurosurgery on January 27, 1948 complaining of right facial pain. This had started in June of 1947. The pain regularly occurred at 2:00 p.m., 7:00 p.m., and 9:30 p.m., lasting one-half hour. The patient had had several free intervals, the longest of three week's duration. The pain was described as very severe, and was associated with tearing of the right eye. The location of the pain was predominantly orbital with a bursting, throbbing, pressure sensation described in, above and behind the eye with occasional radiation into the right maxillary and anterior temporal areas. The pain was precipitated by the intake of alcohol. A diagnosis of atypical petrosal neuralgia was made.

On January 29, 1948 an injection of the right cervical sympathetic chain in the neck was carried out during a headache and this brought immediate relief. Likewise during a subsequent headache, the patient was completely relieved by injection of procaine of the right supraorbital nerve. Alcohol used on one occasion in the office failed to produce a headache, but subsequently on two occasions did produce a typical headache. The second block of the sympathetic chain on the right was performed on February 5, 1948. He was seen one month later at which time he felt that the whole cycle was "broken" and said that he had had no severe headaches. A similar report was obtained in April, 1948.

Brain atrophy occurring in the younger age group is often accompanied by headache. The pain is located usually on the side of the greatest ventricular dilatation, and is a relatively constant dull ache with moderately severe exacerbations. In four of these

cases bilateral cervical sympathectomy relieved the headache as well as favorably altering the sensory and motor symptoms and signs. In four other cases where surgical intervention was not advised, procaine injections of the cervical chain offered relief.

P. S.,[†] seen in March, 1947, complaining of severe headache of six months' duration. One month before admission a paresis of the right side of the body was observed, and a history of progressive loss of memory was obtained. Pneumonencephalogram showed a moderately severe cerebral atrophy. Bilateral stellate ganglionectomy was performed on March 25, 1947 and following this procedure the patient was relieved of her severe headaches. She stated eight months later that there was noted only an occasional slight headache which she associated with constipation. Her alertness and memory were somewhat improved following the operation.

P. D. P., referred by Dr. Tom Turner, of Tulsa, was first seen in November, 1947, complaining of inability to walk properly, severe intermittent headaches, and tremor of the right side of the body. A history of encephalitis was obtained. Neurological examination showed findings consistent with a diagnosis of Parkinson's syndrome associated with cerebellar ataxia and a staggering gait. Pneumoencephalogram revealed a moderate dilatation of both lateral ventricles. A bilateral superior cervical ganglionectomy was performed, and following this procedure the headaches did not recur. The patient had slight improvement in walking. The tremor was not relieved. There was no alteration in the ataxia of the upper extremities. His speech was improved.

Facial neuralgia has offered many problems in treatment. Fay,¹⁴ in 1932, described the role of sympathetic fibers in the possible production of the pain, and since then isolated cases have been described in which relief was obtained by interruption of sympathetic impulses. Bingham,¹⁵ in 1947, reported relief in two cases of facial causalgia. Both these patients had symptoms referable to skin areas supplied by the fifth cranial nerve. We have seen three cases where the attacks of pain recurred in cycles with a relatively sharp localization to the infraorbital region on one side. Two of these patients had temporary relief from procaine blocks. In two cases of moderately severe burning pain associated with paresthesia following rhizotomy for trigeminal

neuralgia, we have found that procaine blocks of the sympathetic chain will produce over 60 percent relief of the burning sensation. In one other case no relief was obtained.

UPPER EXTREMITY PAIN

The patient with periarthritides of the shoulder and inability to raise his arm above the horizontal plane, if not cured by prostigmine and physiotherapy, can be materially benefited by interruption of sympathetic impulses. One or two blocks will occasionally bring about total alleviation of pain which is permanent in 33 percent of the cases. In other cases, 40-60 percent relief is experienced from the first and subsequent blocks. The duration of freedom from, or partial relief of the pain is many hours and days longer than the persistence of the Horner's syndrome. Similar results may be obtained in painful syndromes associated with fractures about the shoulder joint and in contusion of the brachial plexus, as well as in the major and minor causalgias.

P. J., referred by Dr. Eric White and Dr. R. W. Goen, of Tulsa, sustained fractured ribs and scapula in a recent tornado at Bernice, Oklahoma. He complained of severe constant deep boring pain in the left upper arm, radiating downward into the forearm. On examination the function of the brachial plexus and its nerves was intact except for slight hypalgesia in the ulnar nerve area. Procaine block of the left cervical sympathetic chain afforded almost complete relief of the pain for over 12 hours. Subsequent blocks were likewise effective in alleviating the pain. After six days the pain entirely disappeared.

Mrs. H. H., referred by Dr. Franklin of Broken Arrow, complained of severe intractable shoulder pain on any movement of the left arm. Neurological and physical examination showed only extreme tenderness of the shoulder joint. A diagnosis of periarthritides was made. Sympathetic block produced "90 percent relief" in three minutes and the relief lasted over two days. Subsequent blocks again brought about relief.

Mrs. O. J., referred by Dr. Ruprecht, of Tulsa, had typical periarthritic pain and limitation of motion in the left shoulder joint. One injection of the cervical chain produced complete and permanent alleviation of pain for four months.

In painful swelling of the hand associated with paralysis due to a cerebral vascular disease or tumor, or following a block dis-

[†]Patient was seen in the Department of Neurosurgery at the Cleveland Clinic on the service of Dr. Gardner.

section of the axilla for carcinoma of the breast, procaine blocks and stellate ganglionectomy have produced marked relief. The injection or operation is done on the homolateral side. In Sudeck's atrophy and reflex sympathetic dystrophy of Evans, where localized pain of severe type is noted in the hand, unilateral blocks will relieve the edema, pain, cyanosis and other vasomotor changes.

An interesting case was that of F. E. F., referred by Dr. D. O. Smith, of Tulsa, seen October 24, 1947, complaining of the sudden onset of weakness of the right arm and leg, swelling of the right hand and pain in the right shoulder and fingers of six weeks' duration. Examination revealed a right hemiparesis, hypertension, arteriosclerosis and periarthritides of the right shoulder. A diagnosis of cerebral vascular disease was made and the patient was given nicotinic acid. He showed no definite improvement during the next four months. Bilateral sympathetic blocks on April 2, 3, 5, 7, 9 and 14, produced increased use of the right arm and leg as well as 60 percent relief of pain in the right shoulder and fingers on movement of the involved joints. This improvement of function and relief of pain persisted.

In five patients with carcinoma of the lower part of the body with lumbar, pelvic, or sciatic pain, who refused or were not advised to have cordotomy, bilateral blocks gave temporary partial relief, lasting from six to 14 hours. In these cases it was difficult to make accurate evaluations, but all were able to move the involved portions of the body with less discomfort. In cases of posttherapeutic neuralgia, phantom limb and thalamic types of pain, blocks were often of great benefit.

DISCUSSION

The first papers on the treatment of vascular disease of the brain were by Leriche and Fontaine¹⁶ in 1936 and Mackey and Scott¹⁷ in 1938. They reported 11 of 19 cases of cerebral vascular accidents improved by stellate blocks, and stressed the fact that cerebral embolism responded most favorably. More recent reports on the cervical sympathetic system have indicated that eradication of sympathetic impulses will favorably influence the morbid changes occurring in Parkinson's^{18 19} disease, brain atrophy,^{20 21} and the hemiplegia of cerebral vascular disease. Gilbert and deTakats²² in 1948 discussed the improvement in 19 of 25 cases of cerebral apoplexy. From these reports it was suggested that sympathetic

blocks might release arteriolar spasm, improve venous drainage or increase the blood flow to the whole brain.

Other mechanisms influenced by the sympathetic chain were stressed by Karnosh and Gardner.^{23 24} These authors described in 1947 and 1948 the favorable results of interruption of sympathetic impulses in depressive psychoses. Risteen and Volpitto²⁵ in 1943 and 1946, Scoville,²⁶ in 1943, reported improvement in over 1600 cases of hemiplegia due to vascular accidents, and Parkinson's syndrome.

Evidence has been accumulating that painful sensations travel in or are mediated by sympathetic pathways. It is suggested that one of the mechanisms involved in the relief of the painful syndromes described above is the interruption of afferent painful impulses passing over the cervical sympathetic chain of the homolateral side. Operating under local anesthesia we have confirmed the observations of J. A. Brown²⁸ (1936) and Max Peet²⁷ (1929) that traction on or stimulation of the stellate ganglia caused terrific head and neck pain. Recently, Threadgill²⁹ (1947) showed that painful sensations pass to the cord by way of the sympathetic ganglia.

A study of the cases revealed also the interesting fact that occasionally a contralateral cervical block or contralateral sympathectomy produced relief of pain especially in the lower part of the body. This was dramatically illustrated in a case of thalamic pain referred by Dr. Ruprecht, of Tulsa, and was observed in six other cases including one case of posttherapeutic neuralgia. In these cases blocks were done twice daily or once a week to evaluate tentative hypotheses to explain the partial or complete relief of pain. In other cases summation of effect was observed by blocking the contralateral side and 30 minutes later the homolateral side. The impression was obtained that a reflex arc may be interrupted by the eradication of sympathetic impulses and that the thalamus and hypothalamus may be concerned in the arc. A tentative hypothesis was postulated; viz, that cervical sympathetic efferent impulses arising from the cervical and thoracic cord may modify hypothalamic and thalamic sympathetic connections to inhibit and facilitate the passage of motor and sensory impulses through these areas.

SUMMARY

In 100 cases where pain was the chief complaint, procaine injection of the cervi-

cal sympathetic chain and cervical sympathectomy favorably altered the clinical course. Unilateral frontotemporal headache and periarthritic pain in the shoulder were especially relieved.

The degenerative changes, vascular spasm and pain associated with Sudeck's atrophy, reflex sympathetic dystrophy and arteriosclerosis were benefited by temporary interruption of cervical sympathetic impulses. Pain of more obscure origin as well as thalamic types of hyperesthesia could be relieved by contralateral block.

The role of afferent impulses as well as the possible influence of efferent sympathetic impulses are discussed.

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TWENTY-FIVE YEARS AGO

Dr. R. L. Edmonds, Arnett, has removed to Shattuck.

Dr. L. R. Wilhite, Perkins, was recently appointed to a Majority in the Medical Officers Reserve Corps.

Dr. Fred S. Clinton, Tulsa, celebrated his 50th birthday on April 15th, with a wedding anniversary party at his home.

Dr. Lucile Blachly, Drumright, has been named to the director of the Bureau of Child Hygiene, succeeding Mrs. Arthur Benson.

Creek County Medical Society will entertain Payne County "Fiscans" and their wives at a banquet and funfest May 1st at Drumright.

Dr. O. G. Bacon, Frederick, was robbed of the front springs of his Ford recently, the thieves entering his garage to accomplish the job, also emptying the gasoline tank of its contents and taking two coats that were in the car.

The *National Hospital Day Committee* has designated *Dr. Fred S. Clinton*, Tulsa, as State Chairman, and authorized him to secure the cooperation of all the hospitals in the state in the observance of May 12 as National Hospital Day.

Dr. J. Hutchings White, Muskogee, is visiting his mother at Danville, Va., where she recently celebrated her 86th birthday.

PRIMARY RENAL NEOPLASMS*

K. F. SWANSON, M.D.

AND

CHARLES HULSE, M.D.

TULSA, OKLAHOMA

While we have nothing new to add to a discussion of primary renal neoplasms we feel it well worthwhile to re-emphasize today the following points:

1. For practical clinical purposes we may consider all renal neoplasms malignant. Those rare benign tumors of the kidney are almost curiosities. They are impossible of accurate differentiation, clinically, from malignant tumors, and so are subject to the same surgical treatment.
2. The prognosis in the case of these neoplasms is in general very poor. To digress a moment, a very simple but very satisfactory classification of these tumors, from the clinical standpoint, is as follows:
 - A. Neoplasms of the kidney of childhood. The Wilms tumors, or embryonal sarcomas.
 - B. Neoplasms of the adult kidney.
 1. Those of the renal parenchyma, clinically indistinguishable, so classify them all "hypernephroma." About 95 per cent of tumors in adult kidneys.
 2. Those of the renal pelvis. Most are transitional cell Ca, 25 per cent are squamous cell Ca. These make up five per cent of the adult kidney tumors.

The prognosis in Wilms tumor is very poor. Most of these cases die in two or three years regardless of the type of therapy. Thirty per cent have metastases when first seen, usually to the lungs. Nesbit recently recorded 16 cases of operable tumor, 58 per cent being alive after from 3 to 12 years after treatment, this is the best report that we know of.

In the instance of hypernephroma, we do well if we cure

20 per cent of them. Here a five year cure means nothing, many succumb from local recurrence or distant metastases after this period of time. About 20 percent have metastases when first seen, 10 per cent or so presenting themselves primarily because of symptoms of these metastases, usually to the lungs or bone.

As far as we know there are no known cures of squamous cell carcinoma of the renal pelvis, but the prognosis in transitional cell carcinoma of the renal pelvis may be said to be fair. This tumor announces itself in general earlier and spreads later, permitting its complete removal if its warnings are not neglected. These tumors are the counterpart of transitional cell carcinomas of the bladder, where apparent cures are not unusual.

3. With this poor prognosis, then, and with our present methods of treatment, the only way we can improve our results in the treatment of these lesions is to make earlier diagnoses.

It is therefore of prime importance to emphasize today the importance of:

- A. Checking the patient urologically, carefully, and at once when he presents himself with urological symptoms, especially the symptoms of hematuria, pain, and/or abdominal mass, which we all recall is the triad of symptoms diagnostic of renal tumor. Any one of these symptoms should call for a careful renal check, remembering that while in adult type tumors hematuria is the most common symptom, occurring in about 60 per cent of cases, in the child hematuria is an uncommon symptom of tumor, the patient usually being brought in after the mother or other caretaker

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of the child has noted a mass in the abdomen in handling the child. It should be pertinent to mention here that Wilms tumor is the most common malignancy of the child, and that this tumor is the most common cause of an abdominal mass in the child.

- B. Checking the patient urologically, and carefully, when the cause of any disturbance is not clear, be it related to the genito-urinary tract or not. For instance, 60 per cent of patients with hypernephroma have GI disturbances when first seen. Some have *only* GI disturbances. The patient with only chills and fever, the cause for which is not readily discernible, may have hypernephroma, these symptoms due, apparently, to foreign protein absorption from the tumor. Malaise, weight loss, and other indefinite symptoms, usually occurring late in malignancy, may be the first of symptoms in hypernephroma.

Realizing then that certain patients must have early and conclusive checks of their upper urinary tracts, in order to rule in or out renal neoplasm, how can this be carried out easily in the average instance?

Of all the signs and symptoms of renal neoplasm the characteristic pyelogram is the most important. It is quite constant, seldom absent, very dependable, and the most pathognomic. An intravenous pyelogram is so simple to accomplish, with a minimum of expense and discomfort to the patient, that it can be done under almost any circumstances. I do not mean that we should depend upon such a study to tell the whole story, in fact there is even a great danger of reading too much into an intravenous pyelogram. But in a well prepared patient it is certainly rare that, if a renal tumor is present, a suggestion of the pathology cannot be noted so that further necessary work can be done to determine the situation more accurately. This, then, can be considered a plea for a more general use of intravenous pyelography, not only in those cases with frank urinary symptoms, but also in those with unrelated symptoms which are not readily and accurately diagnosed. As we make more or less routine chest films, gall bladder studies, and GI series, so can we screen many more patients with these simple

renal studies, and we will diagnose many more renal neoplasms, as well as other renal disorders, much earlier.

One other word in this regard. Assuming the patient with apparent lesions, especially osteolytic bone lesions, the nature of which is obscure, the pyelogram will often indicate the site of a primary neoplasm. True, this is not early diagnosis, but often this discovery by means of this simple procedure will save the patient a needless exploratory operation of the metastatic site. A patient recently had the entire scapula removed for tumor which proved to be hypernephroma. Still another patient had two cervical laminectomies for what later proved to be metastases from a hypernephroma that was large, but causing no urinary symptoms. Preliminary urograms would have perhaps saved these patients from useless major treatment.

Another possible method of making early diagnoses in the case of renal neoplasms, although not as yet generally available, is that of the Papanicolaou staining technique. Recently a 35 year old female was seen, she having had hematuria a few days before. She was not bleeding when seen. Pyelograms showed only a questionable deformity of the upper calyx on one side, enough deformity to arouse suspicion, but not enough to base a decision of nephrectomy upon. However, urine from this side was positive on two occasions for tumor, by the Papanicolaou technique, so nephrectomy was done and a very small hypernephroma was found. It may be, that as more work is done with this technique, and if it is found to be of enough value, it will become more easily available to every day use in screening patients for neoplasm.

SUMMARY

1. We may consider all neoplasms of the kidney to be malignant.

2. These neoplasms carry a very poor prognosis.

3. Early diagnosis is necessary in order to improve the prognosis of these cases.

4. A plea has been made for the more general use of intravenous pyelography in screening patients, including those with obscure complaints which may be seemingly unrelated to the urinary tract as well as those with frank urinary tract symptoms.

5. The Papanicolaou staining technique has been mentioned as another possible method of diagnosing early renal neoplasms.

THE SURGICAL TREATMENT OF ENDOMETRIOSIS*

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Endometriosis may be defined as the presence of endometrium in an abnormal location. The condition is of two types, internal and external endometriosis. The first, internal endometriosis, refers to adenomyosis of the uterus, the presence of endometrial glands within the wall of the uterus. This first condition was described in 1864 by Rokitansky. From 1893 to 1896 von Recklinghausen discussed in a number of papers adenomyoma of the uterus and forwarded the view that they were caused by abnormal differentiation from the wolffian duct system. He thought that the glands in the depth of the uterus occurred quite separately from the endometrium in the cavity. In 1897 T. S. Cullen described three cases, and by means of serial sections, demonstrated that the endometrium invading the wall of the uterus in these cases was connected with the endometrium lining the cavity, thus being of mullerian origin. There was a lively personal correspondence between Cullen and von Recklinghausen for several years before von Recklinghausen agreed that Cullen was correct.

The second type of endometriosis or external endometriosis, with which this paper deals entirely, was probably first described as a case of aberrant endometrium in the ovary by W. W. Russell in 1898. A few other reports followed this paper, but it was in 1921 and 1922 that John A. Sampson presented two of the most comprehensive articles on the subject, now known as pelvic endometriosis, that have ever been written.

In the first paper he reported 23 cases of "Perforating Hemorrhagic (chocolate) Cysts of the Ovary" which he showed to be lined by tissue of mullerian or endometrial nature. He believed that areas of endometrium in the pelvic adhesions were implants escaping from perforating chocolate cysts but did not attempt to explain the origin of endometrial tissue in the ovary.

In Sampson's second paper in 1922 entitled, "The Life History of Ovarian Hematomas (Hemorrhagic Cysts) of Endometrial

(mullerian) Type," he reported 37 cases collected in one year from his private practice, in which he had operated upon 167 women. From the study of these cases he developed the theory that endometrial cysts of the ovary and pelvic endometriosis arise from the implants derived through or from the fallopian tubes. He further concluded that they may arise from the tubal or uterine epithelium. Sampson, in his early work on the subject, was of the opinion that either endometrium or tubal mucosa might give rise to so-called endometriosis and from the definition of his third group he considered the possibility that there might be metaplasia of one of these types of epithelium into the other. In a later report he showed an incidence of 98 cases of endometriosis in a total of 322 patients who came to operation, a percentage of 29.9 percent.

There are several theories of the origin of external endometriosis as retrograde menstruation, from fetal rests (embryonic), from metaplasia of epithelium in the pelvic peritoneum under the stimulus of inflammation, and lymphatic or blood metastasis. Retrograde menstruation explains the vast majority of cases, but obviously not the occasional case of implants in the inguinal glands or in the thigh as recently reported by Schlicke.

There are certain findings most commonly associated with external endometriosis. Cervical stenosis would seem to be present in degree in the majority of cases, at least the cervix is small and the canal is often narrow. Retroversion of the uterus is present in approximately 50 percent of cases, lending again to the idea of retrograde menstruation. Myomas of the uterus are reported in from 35 to 40 percent of cases. The cause of the association is not clear. The fallopian tubes are patent in the vast majority of cases and no salpingitis is present as a rule. This would seem to explain the absence of endometriosis in any large numbers on charity services. Meigs has pointed out the commonness of nulliparity or late child-bearing in series with endometriosis, which may indicate pregnancies in early menstrual life may open the cervix to pro-

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duce good drainage and be a factor in the prevention of retrograde menstruation.

The diagnosis of endometriosis is made, not from the history, but from palpation. The history may be suggestive. In approximately 50 percent of the cases the patient complains of severe grinding type of dysmenorrhea, more constant than cramp-like, more often in the sides than in the center, and commonly radiating to the rectum, causing intense desire for defecation. This complaint, when present, is suggestive, but by no means pathognomic. Menometrorrhagia and sterility are present in 50 percent of the cases. Dyspareunia is a very common complaint. Others have less classifiable symptoms as vague, sharp, intermittent or constant pelvic pain with or without backache. It is of particular interest that some of the most advanced cases of endometriosis may have no symptoms whatsoever and that other cases with minimal endometriosis may have extreme symptoms. The explanation is not available.

Palpation, culdoscopy or laparotomy are the methods by which endometriosis may be diagnosed. Some who misunderstand the pathology of endometriosis think that curetting the uterus should give some indication, but this is not true in any degree. The earliest finding in endometriosis is thickening in one or both uterosacral ligaments. This thickening usually has a nodular character which differentiates it from the induration of inflammation. Errors in diagnosis do occur occasionally. The absorption of such thickening or induration in the uterosacral ligaments following douches or cauterization of the cervix obviously indicates no endometriosis. The second early finding in the diagnosis of endometriosis is the presence of b-b shot nodules in the cul-de-sac palpable through the vagina or through the rectum. These nodules are very characteristic and generally pathognomic of the disease. The next and later finding is the densely adherent ovary of normal size. Adhesions about an ovary may be generally considered as due to inflammation or endometriosis. Often other factors in the case may largely exclude the possibility of inflammation. The next finding is the densely adherent ovarian cyst, the size of a lemon or orange. The differential diagnosis of the adherent ovarian cyst would be a tubo-ovarian inflammatory cyst, malignant cyst or endometrial cyst. Other mentioned associated findings often clarify the diagnosis. A later form of the disease is the adenomyoma of

the rectovaginal septum in which the b-b shot nodules become large, irregular masses filling the cul-de-sac extending into the wall of the rectum and the wall of the vagina but very rarely ulcerating either. In the vagina, bluish cysts may be seen projecting into the posterior vaginal wall from the nodular adenomyomas. Minute bright red flecks of endometriosis suggesting telangiectactic hemangiomas on the cervix and vaginal wall are not too uncommon. Rarely nodules may be found in the vulva, inguinal glands and umbilicus which swell and become painful at the time of menstruation.

It is of interest that retroversion of the uterus occurs in general in 50 percent of the cases. In this report retroversion was found in 59 percent of the early cases of endometriosis. Myomas of the uterus have occurred in 16 percent of the early cases and 61 percent of the late cases of endometriosis.

The treatment of external endometriosis may consist of observation in (a) early cases with minimal symptoms, (b) late cases in some instances with minimal symptoms, provided there is no question of malignancy in the diagnosis. Surgery is indicated for sterility provided the endometriosis is definite and particularly if retroversion is present. Semen studies should be made on the husband before operation. Pain or bleeding is also an indication for major surgery. Tumor masses that may represent malignancies require exploration, particularly ovarian cysts. Prophylactic dilatation and suspension of the uterus, also prophylactic excision of implants in early cases with minimal symptoms are plausible procedures but not yet generally acceptable. Individual cases of young women, before the age of 20, with retroversion and small shotty nodules indicate surgery even though there are few or no symptoms. The early diagnosis and operation in such a case of a very young woman should prevent the complete destruction of the ovaries which occurs commonly in women in their late 20's and 30's.

Conservative surgery is indicated for all young women under the age of 30 and all women under the age of 35 strongly desirous of having children, even though a second operation may be necessary in either case. The operation generally consists of dilatation of the cervix, frequently with curettage if there is any menstrual abnormality. Cauterization is indicated if cervicitis is present. The abdomen is opened and an at-

tempt is made to excise all endometrial implants in the ovaries, uterosacral ligaments, cul-de-sac, sigmoid, etc., using either the electric loop or sharp dissection with scissors or knife. Endometrial cysts in the ovaries are resected and the ovary closed with fine catgut. Myomas, when present, are excised. Suspension of the uterus is indicated in practically every case, in all those with retroversion, and in the remaining to prevent a possible retroversion occurring from residual or recurring implants in the cul-de-sac and on the wall of the sigmoid which might draw the uterus posteriorly by adhesions. It is to be re-iterated that this operation of conservative surgery is indicated first for sterility and preservation of child-bearing function, or where all, or essentially all, endometriosis can be removed. If the uterus must be removed, as for multiple fibroids, an extensively involved ovary should not be resected, but should be removed. An effort should be made to excise all implants in order to prevent recurrence and that estrogens may be given in the menopause. A second operation must be hazarded for the main purpose of pregnancy.

Radical surgery removing both ovaries, tubes and uterus is indicated in cases with extensive endometriosis. This includes those with both ovaries destroyed with chocolate cysts, extensive adenomyosis of rectovaginal septum, involvements of the colon or terminal ileum which may produce partial or complete obstruction, widespread endometrial implants, sizeable fibroids and severe cervicitis, when more children are no object, and particularly after the age of 35. In the latter instance the ovaries are not routinely removed in cases with endometriosis after 35, particularly if a normal, or essentially normal, ovary may be present and remaining endometriosis be excised or minimal.

One of the greatest tragedies in gynecology, aside from incurable malignancy, is the young woman with extensive endometriosis which cannot be excised but which requires castration. Treatment then is with mild sedation and testosterone propionate. The result of this therapy is not nearly as satisfactory as in the case of the menopausal woman without endometriosis treated with estrogens. Certain cases with minimal residual endometriosis may be treated intermittently with estrogens and testosterone, observing the variation in cul-de-sac thickening.

An analysis of 250 personal operations for endometriosis may explain one view most clearly of the surgical treatment of endometriosis. These 250 operations occurred in 853 consecutive laparotomies, an incidence of 29.3 percent. This is about the average that occurs in the private practice of gynecology.

Radical surgery was performed in 93 or 37.2 percent, conservative operations with hysterectomy in 54 or 21.6 percent and strictly conservative surgery, maintaining the reproductive functions in 103 or 41.2 percent. The performance of radical operation in 37.2 percent of the cases may clarify the misunderstanding on the part of some that the complete operation is indicated in every case discovered at operation. In this group that was castrated 79.6 percent were above the age of 35, while 20.4 percent were below the age of 35. Certainly the more severe forms of the disease are usually found after the age of 35. Of this group 51.6 percent had previously had one or more children, 8.6 percent were unmarried which leaves a presumably sterile group of 39.8 percent. If pregnancy prevents subsequent endometriosis by providing good drainage at delivery then it is evident that many of this group must have had some degree of endometriosis before their first pregnancy. That point is entirely conjectural. These patients complained of dysmenorrhea in 59.1 percent and menometrorrhagia in 55.4 percent. Myomas of the uterus were found in 50 patients or 53.7 percent while retroversion occurred only 19 times or 20.4 percent. The lower percentage of retroversion in this group in part was due to the occurrence of fibroid tumors in the uterus and large endometrial cysts which pushed the uterus anteriorly in some instances.

Conservative operations with hysterectomy were performed in 54 or 21.6 percent. This means that although hysterectomy was performed some ovarian tissue remained in the patient preventing a menopause at the time. In this group 70.4 percent were over the age of 35 while 29.6 percent were younger than 35. Fifty per cent of these patients had previously been delivered of children. Six were unmarried which leaves a presumably sterile group of 38.8 percent. Again it is surprising that the sterility was not of higher degree. Dysmenorrhea was complained of by 66.6 percent as was menometrorrhagia. Myomas of the uterus were found in 61.1 percent and retroversion in 25.9 percent. By no means is it necessary to

remove an essentially normal ovary even though hysterectomy may be indicated. If all the endometriosis has not been excised and it progresses and symptoms increase, castration by x-ray would be indicated provided no recurrent endometrial cyst of the ovary has occurred.

By far the most interesting group and most important in this series is that of the strictly conservative operation. In 103 patients, or 41.2 percent the age distribution here is strikingly different, 77.6 percent being younger than 30 years of age, while only 32.4 percent were above the age of 30. Previous pregnancy had occurred in only 11.6 percent. Dysmenorrhea was complained of by 87.4 percent and menometrorrhagia in 42.7 percent. Myomas of the uterus occurred in 16.4 percent, evidently because of the younger age group, while retroversion of the uterus occurred in 59.2 percent. Thirty-five of this group were unmarried. Subsequent pregnancy for the first time occurred in 23 of the remaining 68 or in 33.8 percent. The occurrence of pregnancy in one-third of the patients who had a conservative operation for endometriosis and whose complaint was largely that of sterility is the most encouraging finding in this entire series and indicates the great value of such tedious dissecting operations.

In the conservative group of 103 cases the electric loop was used to excise implants in 37. This ingenious device allows one to scoop out implants as though in butter, particularly from the back of the uterus, in the cul-de-sac and in shaving the wall of the rectum or sigmoid. It is also of value in scooping out very small implants in the ovary, being a great time saver coagulating and preventing bleeding with relative ease. The method must, however, be used with great care about the ureter and over

blood vessels, which may be ruptured or which may explode due to the heat of the electric loop. Actually dissections with long and narrow blunt nosed scissors spreading them as in dissecting the tonsil is the safest means of removing implants and probably the most thorough. This is in particular reference to those implants in the uterosacral ligaments and the cul-de-sac. However sharp dissection is far more time consuming and difficult. The dissected areas are always closed over with fine chromic catgut or fine silk for peritonealization. Suspension of the uterus, preferably of the modified Gilliam type, is used in practically every case of conservative operation for endometriosis, whether retroversion be present or not. This is to correct retroversions or to prevent subsequent retroversions formed from recurrent endometriosis and adhesions to the rectosigmoid. Presacral sympathectomy was performed in six or 5.8 percent giving fair or good results in each case. However excision of implants with suspension as a rule gives excellent improvement. Silk technique was used throughout in nine cases or 8.7 percent. Even in resection of the ovaries fine silk sutures were used apparently with no difficulty. Ordinarily one would think that catgut would be better in the ovaries so that it would be absorbed and not interfere with subsequent variation in size and shape of the normal ovary. It was felt that all of the endometriosis was excised in only 24.2 percent of the conservative group. This means that recurrence and subsequent operation will be necessary in a considerable percentage, although Sampson has stated that it is remarkable how few will need a second operation.

A series of 250 cases of endometriosis occurring in 853 consecutive laparotomies is

Surgery of Endometriosis

| | |
|--------------------------|-------------|
| 250 Cases in | |
| 853 Laparotomies | (29.3%) |
| Radical Surg. | 93 (37.2%) |
| Conservative <i>with</i> | |
| Hysterectomy | 54 (21.6%) |
| Conservative | 103 (41.2%) |

Radical Operations 93 (37.2%) in 250 cases

| | | | | | | |
|-----------------------------|------------|-------|-------|-------|-------|-------|
| Ages: | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 |
| Cases: | 5 | 11 | 27 | 31 | 11 | 5 |
| | 20.4% | | | 79.6% | | |
| <i>Previously delivered</i> | 48 (51.6%) | | | | | |
| <i>Unmarried</i> | 8 (8.6%) | | | | | |
| <i>Dysmenorrhoea</i> | 55 (59.1%) | | | | | |
| <i>Menometrorrhagia</i> | 52 (55.4%) | | | | | |
| <i>Myomas</i> | 50 (53.7%) | | | | | |
| <i>Retroversion</i> | 19 (20.4%) | | | | | |

Conservative Operations 103 (41.2%) in 250 cases..

Ages: 18-20 21-25 26-30 31-35 36-40

← 5 35 40 → ← 18 5 →
77.6% 22.4%

| | |
|-----------------------------------|------------------|
| <i>Previously delivered</i> | 12 (11.6%) |
| <i>Dysmenorrhoea</i> | 90 (87.4%) |
| <i>Menometrorrhagia</i> | 44 (42.7%) |
| <i>Myomas</i> | 17 (16.4%) |
| <i>Retroversion</i> | 61 (59.2%) |
| <i>Unmarried</i> | 35 (33.9%) |
| <i>Subsequent first pregnancy</i> | 25 (33.8% of 68) |

Conservative with Hysterectomy 54 (21.6%) in 250 cases....

Ages: 26-30 31-35 36-40 41-45

← 1 15 → ← 27 11 →
29.6% 70.4%

| | |
|-----------------------------|------------|
| <i>Previously delivered</i> | 27 (50.0%) |
| <i>Unmarried</i> | 6 (11.1%) |
| <i>Sterile (presumed)</i> | 21 (38.8%) |
| <i>Dysmenorrhoea</i> | 36 (66.6%) |
| <i>Menometrorrhagia</i> | 36 (66.6%) |
| <i>Myomas</i> | 33 (61.1%) |
| <i>Retroversion</i> | 14 (25.9%) |

reported. Radical surgery was performed in 37.2 percent, conservative surgery with hysterectomy in 21.6 percent, while truly conservative surgery retaining the child-bearing function was performed in 41.2 percent. The conservative group is by far the most important and 77.6 percent of the cases were younger than 30 years of age. One third of these cases subsequently became pregnant for the first time. Patience is stressed in the

necessity of attempting to excise endometrial implants whether it be with the electric loop or with sharp dissection. Suspension of the uterus is indicated routinely. The occurrence of endometriosis in approximately 30 percent of all gynecologic laparotomies makes this a major disease and one that must be well understood by every surgeon.

A RESUME OF INSULIN SHOCK TREATMENT AT CENTRAL OKLAHOMA STATE HOSPITAL

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The so-called shock treatment has been administered at the Central Oklahoma State Hospital for over 11 years. At the time of its instigation the claims for its good results were widely heralded and all psychiatrists earnestly hoped that its claims would not prove hollow. Many kinds of treatment for functional mental illness had been proposed but none had proved of any striking benefit. Therefore, we waited with great anticipation that something had at last been

found that might remove the greatest cancer of all human illnesses.

In a review of the history of this type of treatment, one will recall that the treatment was used in treating mentally ill first by Doctor Sakel of Vienna, Austria. He used insulin in treatment of the alcoholics. Of course, the value of insulin in stimulating metabolic processes, whetting the appetite, etc., had long been known and used in small doses for that purpose by medical

men in general. Dr. Sakel used the insulin in much larger doses than had been previously employed. He observed marked improvement in those of his patients that he treated which manifested mental disorders also. It has been some 20 years since he made this discovery. It might be mentioned in passing that Dr. Sakel was a refugee in New York City from the Hitler regime during the World War II.

The treatment was first instituted in this hospital in the early part of 1937. Perhaps Dr. J. J. Gable, while Assistant Superintendent of this hospital, should be given the most credit for its institution here. He had been corresponding with Dr. M. P. Prosser, who was interning at St. Elizabeth's Hospital in Washington, D. C. (This last named hospital began using the treatment shortly before we did at the Central State Hospital.) Dr. Prosser sent him much information as to the methods of administering the treatment. Eli Lilly and Company of Indianapolis, Indiana, promised the hospital all the insulin used in this treatment for the first year gratis.

The public in general was reading in the newspapers about the reported results of this former treatment and many of the relatives of patients in the hospital doomed with a life-long illness of schizophrenia began writing many letters to the hospital asking that the treatment be tried on their relatives. The majority of the patients treated first, therefore, were patients who had been ill for some time.

An average of 55 patients were treated a year during the years preceding World War II. Records were kept fairly accurate during the first few years. However, with the advent of the war and most of the staff

members being called to service and other personnel being greatly reduced, the treatment necessarily was diminished greatly. Also, the records kept were scant compared with the previous records. The only death that the hospital has suffered from in the form of shock treatment occurred during these war years. Since the cessation of the war, insulin treatment has been resumed on a large scale. It has also been greatly stepped up in the convulsive type.

No psychiatrist will deny the immediate good effects of either form of the shock therapy. Often we see results that are almost phenomenal or miraculous. As an example, the examiner recalls a recently treated case which suffered extreme depression of involuntal melancholia for many months. Treatment was held in abeyance because of objection of one of the relatives. When the patient lay at the point of death from inanition because of her refusal of food and results of her depressive delusions, this relative finally consented to treatment. Only two convulsions were given; the patient soon went home. At last report, she is now very happy, helping with the house work, in good spirits and enjoying life.

Our great joy in seeing the wonderful results of the treatment was soon dampened by observations that so frequently improvements made, began to regress. We soon had to make reports to the relatives that "the wonderful results that so and so had shown from treatment do not seem to be sustained!"

A review of the results will be interesting. Appended hereto are tables giving a resumé of the results. Each table is self explanatory. The records are as complete as has been possible to keep with the limited help available. Undoubtedly several of the patients

SUMMARY OF TYPES OF PATIENTS TREATED WITH INSULIN COMA

Showing number out of hospital of each type

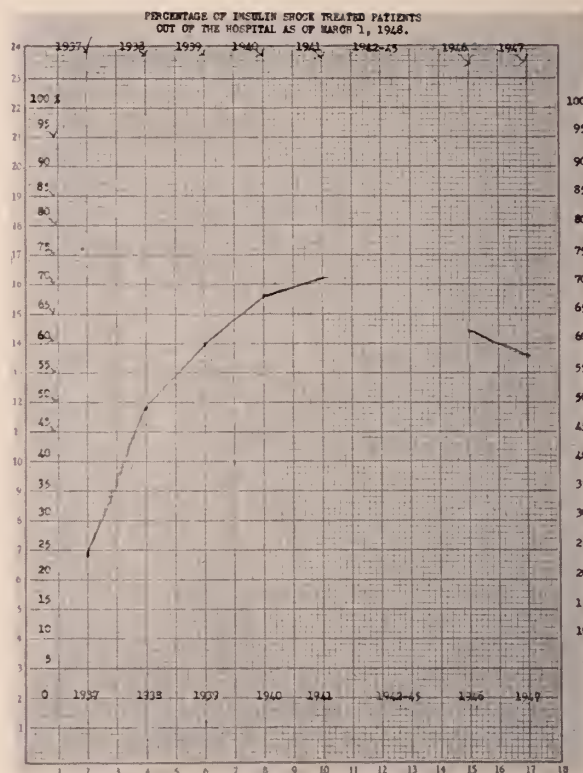
| Year of Treatment | Catatonic Schizophrenic | | Paranoid Schizophrenic | | Hebephrenic Schizophrenic | | Mixed Schizophrenic | | Simple Schizophrenic | | Manic Depressives | | Involuntal Melancholia | | Miscellaneous Types | |
|-------------------|-------------------------|-----|------------------------|-----|---------------------------|-----|---------------------|-----|----------------------|-----|-------------------|-----|------------------------|-----|---------------------|-----|
| | Total | Out | Total | Out | Total | Out | Total | Out | Total | Out | Total | Out | Total | Out | Total | Out |
| 1937 | 27 | 6 | 10 | 3 | 9 | 1 | 6 | 2 | 1 | | 1 | 1 | | | | |
| 1938 | 9 | 4 | 21 | 10 | 9 | 4 | 13 | 6 | 1 | | 4 | 3 | 2 | 2 | | |
| 1939 | 13 | 8 | 19 | 11 | 7 | 3 | 7 | 7 | 1 | | 3 | 1 | | | | |
| 1940 | 18 | 11 | 10 | 8 | 13 | 10 | 15 | 10 | | | 3 | 2 | 1 | | | |
| 1941 | 24 | 17 | 18 | 11 | 14 | 11 | 11 | 8 | 1 | 1 | 15 | 10 | | | 6 | 6 |
| 1942 to 1945 | records incomplete | | | | | | | | | | | | | | | |
| 1946 | 51 | 34 | 25 | 18 | 13 | 11 | 10 | 6 | | | 27 | 19 | 12 | 9 | 6 | 6 |
| 1947 | 23 | 11 | 14 | 5 | 7 | 2 | 17 | 6 | 2 | 1 | 25 | 19 | 12 | 12 | 4 | 4 |
| Total | 165 | 91 | 117 | 66 | 72 | 42 | 79 | 45 | 6 | 2 | 78 | 55 | 27 | 23 | 16 | 16 |

considered outside of this hospital are now in some other hospital. We have not followed up the condition of the patients after leaving the hospital here.

Convulsive shock therapy was started here in 1938. After the beginning of such many, many of the patients were given a combination of both forms of treatment, which undoubtedly accounts for the increased results after the first year. Convulsive shock therapy has been used much more extensively than insulin coma because of the much greater ease of administration and the lesser danger. About 100 convulsive treatments are being given at this time, that is about 100 patients are being treated twice weekly.

CONCLUSION

It is the writer's opinion that shock treatment, both insulin coma and the convulsive type, is very beneficial treatment for the functional psychoses. They both should be continued. The results obtained immediately after treatment are often phenomenal, but too often the good results obtained do not remain fixed. Many patients treated show a regression of their mental illnesses shortly after cessation of treatment. There has been only one fatality from shock treatment at this hospital.



RESUME OF INSULIN SHOCK TREATED PATIENTS

(as of March 1, 1948)

| Year | Total treated | Number remaining in hospital | % | Number died after treatment | Number dying of tuberculosis | Number out of hospital | % | Total admissions to hospital | Ratio of No. Treated to Admissions |
|--------------|--------------------|------------------------------|----|-----------------------------|------------------------------|------------------------|----|------------------------------|------------------------------------|
| 1937 | 54 | 32 | 59 | 9 | 7 | 13 | 24 | 903 | 1:16.7 |
| 1938 | 59 | 25 | 42 | 5 | 4 | 29 | 49 | 1042 | 1:17.7 |
| 1939 | 50 | 17 | 34 | 3 | 2 | 30 | 60 | 1047 | 1:21 |
| 1940 | 60 | 17 | 28 | 2 | 1 | 41 | 68 | 1042 | 1:17.4 |
| 1941 | 89 | 24 | 28 | 1 (suicide) | 0 | 64 | 71 | 1016 | 1:11.4 |
| 1942 to 1945 | records incomplete | | | | | | | | |
| 1946 | 144 | 40 | 28 | 1 (suicide) | | 103 | 62 | 1393 | 1: 9.7 |
| 1947 | 104 | 44 | 42 | 0 | 0 | 60 | 58 | 1186 | 1:11.4 |
| Total | 560 | 199 | | 21 | 14 | 340 | | 7629 | 1:13.6 |

IMPORTANT

Every member is urged to complete professional information questionnaire of the Oklahoma State Board of Medical Examiners. Mail as requested directly to Oklahoma State Board of Medical Examiners, Braniff Building, Oklahoma City.

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THERAPEUTIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pharmacology and Medicine*

CARDIAC EMERGENCIES II

ARTHUR A. HELLBAUM, PH.D., M.D., R. Q. GOODWIN, M.D.,
ROBERT H. BAYLEY, M.D., W. T. MCCOLLUM, M.D.,
PAUL W. SMITH, PH.D.

DOCTOR HELLBAUM: This is the second of two therapeutic conferences held on cardiac emergencies at the University of Oklahoma School of Medicine. In the first conference we discussed the treatment of acute congestive heart failure and of cardiac arrhythmias. Today, we would like to discuss the treatment of some other cardiac emergencies including angina pectoris, myocardial infarction and cardiac tamponade. Dr. Goodwin will open the discussion.

ANGINA PECTORIS

DOCTOR GOODWIN: Pain is the characteristic feature of angina pectoris, and it is at the relief of this pain that our therapy is aimed. Authorities are not in agreement as to the mechanism of production of this pain, but the consensus is that it is produced by myocardial ischemia, hence our treatment must be designed to relieve this ischemic situation. However, since this pain is severe and because it is located in the area of the heart, or associated with the heart by the patient, we find that we must also treat an excited and apprehensive person, so the problem of treatment of these patients resolves itself into two phases. The first phase, and perhaps the more important of the two, is reassurance of the patient. It is essential to discuss the nature of the disease with him to develop a sense of composure and a quiet mental attitude about his disease. This is a too often neglected phase of treatment of angina pectoris. The second phase of treatment consists in the development of a plan for the general management of the patient; as well as the immediate relief of the distressing attacks of pain. General management of these patients requires that the physician learn the exact

amount of pain the patient has, the amount of exercise he may tolerate before the pain begins and a thorough inquiry into other factors which may precipitate an attack of the pain. These include strong emotion, exposure to cold, and over eating. Naturally his physical activities should be kept below his physiologic exercise tolerance limit. In other words, he should avoid any form of exercise that will produce the pain. If the patient is ready to retire from business or has already retired, a geographical adjustment to a mild or warmer climate, particularly in winter, is usually beneficial. On the other hand, if the patient is the bread earning head of a family and must necessarily continue to work, the problem is increased greatly. This patient must be treated in such a way as to get the most out of a damaged myocardium always keeping in mind that the patient is laboring under great mental strain brought on by anxieties about his own health plus the responsibilities of taking care of his family. The patient's diet should be considered and he should be cautioned to eat small meals and to avoid overeating at all times. If the patient is overweight, it is usually wise to place him on a reduction diet. Weight reduction should not be drastic but should be accomplished in slow easy steps. In my opinion the anorexic drugs, such as dexedrine, have no place in weight reduction in patients with angina pectoris. In other words, the physician must survey the general habits and activities of these patients and work out a scheme of living for them which will give them the greatest amount of freedom with the best possible prognosis. Before leaving this subject, I would like to caution you against over-treatment. Too frequently these patients are made into cardiac invalids

by the rules and regulations laid down by an over-zealous physician.

Now let us consider the measures that may be used in the immediate treatment of the attacks of anginal pain. In the early stages of the disease the attacks are relieved by rest alone. In fact by the time the physician usually sees the patient, the patient has already discovered that rest will relieve his difficulties and many patients are able to tell with a surprising degree of accuracy the exact amount of exercise they can tolerate before they produce this pain. So our first point in the immediate treatment of the pain is to caution him to stop any physical activity and to rest. He should sit down, or if it is feasible, lie down and wait for the pain to disappear. In addition to rest we use certain drugs which promote the more rapid disappearance of this pain. These drugs are the nitrites the general action of which is the relaxing of smooth muscle all over the body, as well as the dilation of many blood vessels. Particularly, the coronary arteries are dilated and this results in an increased blood flow to the ischemic myocardium and consequent relief of the pain. Nitroglycerin is the most commonly used of the nitrites. Its action is very rapid, usually affording relief from the pain within one minute. Nitroglycerin is administered by the sublingual route, the dose is usually stated to be 1/100 of a grain. Many patients will get just as much relief from a smaller amount and the larger dose frequently produces unpleasant side reactions which are manifest as a transient, pounding headache and marked flushing of the skin. I usually start my patients on 1/200 grain of nitroglycerin and increase the amount if it proves necessary. Some patients require more than 1/100 of a grain to give them relief. Another commonly used nitrite is amyl nitrite. This drug is a volatile liquid and is dispensed in small glass ampules or pearls which are broken and held under the patient's nose to allow him to inhale the vapors. This drug gives prompt relief also, but the side reactions are a little more unpleasant and the drug is a little bit less convenient to use than nitroglycerin.

There are several other nitrites whose duration of action is considerably longer than the two we have just mentioned. Because of their longer duration of action, these drugs are used to prevent rather than to relieve the attacks of pain. I have not found them too efficacious and seldom use them, preferring to use nitroglycerin or

amyl nitrite to relieve the pain, rather than trying to prevent it altogether. Another drug used in the treatment of angina pectoris is alcohol. Despite its bad name, alcohol appears to be an efficient coronary dilator. The mental attitude of each patient toward alcohol will determine whether or not this should be used as a drug in his particular case. Alcohol is usually prescribed in the form of whisky. The dose is one to two ounces before meals and on retiring and is usually taken in the form of whisky and soda. In addition to dilating the coronaries, alcohol also stimulates the appetite and this is a drawback in angina pectoris since we do not want the patient to gain weight or to eat any one large meal. If the patient is a smoker, the question will always arise as to whether his tobacco should be restricted or eliminated. There is a considerable difference of opinion on this point. Some authorities believe that all tobacco should be eliminated, while others believe that this varies with each patient. I agree with the latter. If the use of tobacco produces the characteristic pain, then by all means the patient should eliminate tobacco. If it produces no symptoms, I see no harm in continuing its use in moderation.

MYOCARDIAL INFARCTION

DOCTOR BAYLEY: It is not always easy to tell the difference between myocardial infarction and angina pectoris. Since the treatment is different, it is essential that we establish a correct diagnosis. One of the major problems in myocardial infarction is the relief of pain. This pain is usually described as extremely severe and the distribution of the pain is the same as in angina pectoris. Because the pain is severe and of long duration, morphine is recommended for its relief. In adults morphine is usually given in 1/4 grain doses subcutaneously; however, I see no reason for not using morphine intravenously to obtain more rapid action and to afford more prompt relief to the patient. The dose is the same as in subcutaneous administration. Morphine may have to be repeated rather frequently to relieve the pain of myocardial infarction. It may be necessary to give another quarter grain in half an hour, in one hour, and every several hours during the day and night. As a rule these patients require considerably less morphine on the second day after an infarction. The chief danger from morphine is general depression and particularly depression of the respiratory rate. General depression of these patients results in a loss of general

reflex activity and this seems to be accomplished by a greater tendency to develop pulmonary edema. After pain is relieved, bed rest is usually required. It takes an infarct about eight weeks to become a white scar, so the period of bed rest is approximately four to eight weeks. Some patients who exhibit very little shock in the beginning of the episode may require only a short period of bed rest, if the infarct is small. As a matter of fact, the infarct may be so small and the course so mild that the patient may not be required to go to bed at all. Cases with more extensive myocardial infarcts are often attended by severe shock symptoms. These patients exhibit gray cyanosis and their blood pressure falls often to a hypotensive level. There is debate at the present time as to whether these people should have intravenous blood. The low blood pressure reflects a low cardiac output by the left ventricle. If one attempts to elevate that blood pressure by the rapid infusion of blood into the veins, the result is often a strain on the left side of the heart and the result is pulmonary edema. However, we are anxious for the blood pressure to be increased because the pressure difference between the first part of the aorta and the left auricle and ventricle determines the blood flow through the myocardium.

Desoxyephedrine or desoxyn has been tried in some of these cases and is recommended. It is given intravenously with an initial dose of 5 mgm. which is repeated at the end of 10 minutes and again in half an hour if needed, or the initial dose may be an intramuscular injection of 10 mgm. There seem to be no apparent harmful effects on the heart and yet peripheral blood pressure is increased relieving the gray shock-like appearance, and coronary flow is probably increased. Since the introduction of desoxyephedrine is recent, it probably should be used with caution. Pulmonary edema occasionally develops in conjunction with an acute myocardial infarction. The treatment of acute congestive failure was discussed in the last conference and similar measures are used in the cases complicated by an acute myocardial infarction. However, the problem is a little more complex, for digitalis increases the irritability of ventricular muscle. The zone of muscle surrounding the infarct is already irritable and paroxysmal tachycardia may begin there and this may proceed to ventricular fibrillation. Since digitalis increases the irritability of ventricular muscle it may stim-

ulate the irritable zone around the infarct to paroxysmal ventricular tachycardia or ventricular fibrillation. We must decide between the difficulties arising from congestive failure on the one hand, and the dangers of two ventricular arrhythmias on the other.

Quinidine may be used to lessen ventricular irritability and to decrease the likelihood of the appearance of these dangerous arrhythmias. Remember, unless there are signs of congestive failure, there is no indication for digitalis in myocardial infarction. If pulmonary congestion is marked, it is advisable to use penicillin prophylactically against the possible development of pneumonia. Many of these patients do fairly well for about two weeks and survive the period of sudden death only to die or have their recovery complicated by pulmonary infection. It is now recognized that dicumarol should be used in the treatment of every case of myocardial infarction. Specifically, this drug lessens the incidence of embolic phenomena which result from endomural thrombi. However, dicumarol brightens the overall picture of the prognosis of a case of myocardial infarction and its routine use has reduced the mortality rate from about 25 percent to less than 15 percent of all cases. Dicumarol is given orally with a dose of 150 to 300 mg. the first day. Subsequent dosage is determined by prothrombin time which should be checked daily. The prothrombin time is usually maintained at 20 to 30 percent of normal prothrombin activity. The average patient requires about 100 to 200 mg. of dicumarol daily to maintain the prothrombin activity at this level. If prothrombin activity falls below 20 percent of normal or if hemorrhagic phenomena occur, dicumarol should be discontinued. Large doses of Vitamin K should be given and blood for transfusion should be available for use if necessary. These are the most important drugs and measures used in the treatment of myocardial infarction. In addition, oxygen should be available and should be used whenever the patient is cyanotic or short of breath. This was discussed at the previous conference.

CARDIAC TAMPONADE

DOCTOR MCCOLLUM: Pericarditis is usually the manifestation of a systemic disease, for example rheumatic fever, or it may result from a terminal septicemia, or from trauma such as gunshot wounds or stabbing. The treatment of pericarditis complicated by the fluid of pericardial effusion

centers around three points; pain, infection, and large pericardial effusions with cardiac tamponade. The pain of pericardial origin may not infrequently require morphine in rather large doses. The dose should be adjusted to the age and size of the patient and should be given in sufficient amounts to relieve the pain. In rheumatic pericarditis salicylates alone may relieve the pain. In adults the dose of salicylates usually ranges between 20 and 30 grains of aspirin or sodium salicylate given every three to six hours and is given at night if the patient is awake. Recently it has been stated that salicylate has a specific curative action in rheumatic fever besides offering symptomatic relief. In my opinion there is not yet adequate proof of this belief. Lesser degrees of pericardial pain may be relieved by ice bags. The treatment of an infected pericarditis will depend upon the infecting organism, the sensitivity of which will dictate the choice of penicillin, streptomycin, or sulfadiazine. If the infection is massive and does not respond to chemotherapeutic agents, then aspiration is indicated or if this is not adequate, surgical drainage must be carried out. Massive pericardial effusions with cardiac tamponade are usually the result of trauma such as a penetrating wound; however, extensive pericardial effusion may be produced by other diseases. I have seen one case associated with primary atypical pneumonia. Aspiration or pericardial paracentesis is indicated in extensive effusions. However, the results of pericardial aspiration in effusions due to rheumatic fever are discouraging and should rarely be attempted. Since this is a fibrinous effusion, only small amounts of fluid are obtained on aspiration, and therefore the cardiac situation is not improved.

Pericardial paracentesis can be carried out from four different approaches. First, the needle may be introduced through the fifth or sixth intercostal space, two centimeters medial to the lateral extension of cardiac dullness. One should use a rather large needle, 15 to 16 gauge and the needle should be connected to a syringe by a short piece of rubber tubing. This tubing will allow the needle to move with the contractions of the heart and diminishes the likelihood of tearing the pericardium and allowing fluid to escape into the pleural cavity. Either a 50 or 100 c.c. syringe may be used.

Another approach is through the left fourth interspace, next to the sternum. I have seen this approach used only once, and

in this case the anterior descending branch of the coronary artery was lacerated and the patient expired.

Still another approach is through the epigastrium, directing the needle superiorly and posteriorly toward the left scapula. The needle enters the inferior cardiac space of the pericardium. The presence of fluids creates a fair-sized space and this approach is not too dangerous. The needle should enter the skin at the level of just to the left of the xiphoid process between this structure and the left costal margin.

The last approach which is sometimes used in children, is a posterior approach. The needle is introduced just below the angle of the left scapula. This approach may be used if there is a well defined Ewart's sign present. It is interesting that the removal of large quantities of fluid from these pericardial effusions usually results in only a small decrease in the transverse diameter of the pericardial shadow as shown by X-ray examination. In one case the removal of 1200 c.c. of fluid decreased the pericardial shadow by 2 cm. only, but the patient improved a great deal.

DOCTOR SMITH: There are several questions I would like to ask. Dr. Goodwin, do you use the nitrites prophylactically, that is to prevent the attacks of angina pectoris, and if so which drug would you suggest for prophylaxis. You mentioned the psychosomatic aspects of angina, what do you tell these patients about their prognosis? Dr. Bayley mentioned the sensitization of the heart following coronary occlusion and said that quinidine was a "desensitizing drug." I would like to have his opinion about intravenous procaine as a desensitizing drug in this situation.

Also, Dr. Bayley, is the use of such vasodilators as aminophylline and papaverine of any value in the attempt to reduce the size of the eventual scar or infarcted area in the heart? When utilizing anticoagulant therapy following occlusion, is there any indication for the initial use of heparin for more rapid reduction of the coagulability of the blood?

Dr. McCollum mentioned the large heart shadow seen on X-ray in cases of cardiac tamponade and pericarditis with effusion. In such a case one would be confronted with a patient with a failing circulation and a large heart shadow and one might be tempted to give digitalis. Since this heart would not be dilated, but would actually be constricted by pressure from the accumulated

fluid within the pericardium, what would be the effect of the digitalis?

DR. HELLBAUM: Doctor Goodwin, would you answer the first of these questions?

DR. GOODWIN: I do use the nitrites prophylactically. Specifically, I use nitroglycerin. For example, consider a patient in whom walking produced cardiac pain. If the patient finds that it is necessary for him to walk beyond the limit of his exercise tolerance, he puts a nitroglycerin tablet under his tongue before he starts to walk, and usually he gets by all right. Of course, the patient must realize that he cannot indulge in unlimited exercise just because he has taken his medicine. As for the prognosis to give the patient, (and they all want to know) fortunately, we can tell them that people live as long as 20 years with angina pectoris. That is rare, but we don't tell them that. We also tell them that they can kill themselves tomorrow if they want to. I believe that they should know the seriousness of the problem. They should know that the treatment is largely up to them, that the physician can be of great assistance in directing them how to live with the problem.

With regard to weight loss, we have not used dexedrine because rest is essential to these patients and often dexedrine interferes with sleep. Weight loss is important in these patients and can be accomplished without the aid of drugs. Sometimes five small meals a day instead of three proves more satisfactory because the patient doesn't get so hungry. We do not use any drug except willpower for weight reduction.

MEDICAL STUDENT: Do these patients ever have continuous pain with angina? If so what is the treatment?

DR. GOODWIN: Yes. A patient can have almost continuous pain with angina pectoris. They have pain that is not due to exertion. They may have nocturnal pain. Such cases require individual evaluation. The pain may become so severe as to necessitate a nerve section, or one may resort to nerve block or other special forms of therapy.

DR. HELLBAUM: Thank you, Doctor Goodwin. Now, Dr. Bayley, will you answer the questions about intravenous procaine and also the questions on heparin and the use of aminophylline and papaverine.

DR. BAYLEY: In recent literature, intravenous procaine is being advocated for a number of diseases. It seems to be of value in abolishing the arrhythmias that sometimes arise with cyclopropane anesthesia. It is supposed to accomplish this by desensiti-

zation of the heart. I do not know whether the drug is useful in cases of myocardial infarction; the answer still lies in the future.

With regard to anticoagulant therapy, the results in about 1,000 cases were summed up and reported at the last meeting of the American Heart Association. These results show that anticoagulants are so valuable that their use is recommended in every case of myocardial infarction. It is doubtful that heparin should be given to all of these cases, even though its action begins far sooner than dicumarol. Also, heparin is far more expensive and the technique of administration is more complicated than that of dicumarol.

To return to the use of procaine, I might say that it has been used as a local anesthetic in the relief of cardiac pain. It seems that there are visceral somatic reflexes involved in the production of cardiac pain and that there are several trigger areas usually located at the medial end of the intercostal spaces. When these are injected, there is immediate and complete relief of the cardiac pain, but I have seen only a few such cases reported.

Aminophylline and papaverine have been in use for a long time. The evidence is equivocal as to whether or not these drugs actually improve collateral circulation and thereby reduce the ultimate size of the infarct. Some studies suggest these drugs are beneficial, others claim that no benefit is obtained from their use. So, I believe it is arbitrary as to whether or not these drugs should be used. The xanthines such as aminophylline are frequently used three, or four, or five times a day, every day during the period of the first two weeks following myocardial infarction. Papaverine is not infrequently used after embolic phenomena occur. Supposedly this relieves the vasospasm connected with the embolism, and it is usually given over a period of several days. Another question that often arises with quinidine is whether one should wait for evidence of ventricular irritability before using quinidine in myocardial infarction. If the evidence of the ventricular irritability is ventricular fibrillation, you will not be there in time. The patient will be dead. It takes but a small ischemic region to set up ventricular fibrillation. Whether or not to use quinidine cannot be judged by the seriousness of the case. Some patients who have what appears to be mild attacks of angina, suddenly drop dead. If I were going to use quinidine at all, I would use it

as soon as I saw the patient with myocardial infarction. Personally, I recommend it. I am convinced that death in the first few days in most patients is a physiological accident, and that accident is ventricular fibrillation. It seems a shame that we should lose patients who could recover with only a small scar on their heart, and who would be just as well, practically, as they were before they had the infarct. Their disability will depend upon the remainder of their coronary tree, and that might be just as good as the next man's. A person with a normal sized heart who has one myocardial infarction at 40 years of age might very well live 20 or even 40 years in good health. It would be a shame for him to die a few days after an infarction as the result of a physiological accident, that is ventricular fibrillation. Paroxysmal ventricular tachycardia may develop in these patients after infarction and this is very serious for it may presage the development of ventricular fibrillation. Again, quinidine is the drug of choice. I think that quinidine will be used more and more in the future. Doctors, for some reason, have been afraid of it; why, I don't

know. It decreases the irritability of ventricular muscle and lessens the likelihood of ventricular fibrillation.

DR. HELLBAUM: Dr. McCollum, will you take your question now, please.

DR. MCCOLLUM: This question involved a patient with a large cardiac silhouette and little or no signs of pericardial effusion and whether digitalis is of value in such a case. As a rule, myocardial failure accompanied by pericardial effusion would probably be the result of toxic myocarditis, rheumatic myocarditis or an overwhelming infectious systemic disease. Digitalis is of very little value in acute rheumatic carditis accompanied by failure. That holds true in the other instances also. Certainly pericardial effusions are often overlooked, perhaps because cardiac failure is more common. These patients with pericardial effusions may have a big liver and swollen ankles, but they are not dyspneic or orthopneic and correct therapy will depend upon a correct diagnosis. There would be few cases of pericardial effusion in which digitalis would be indicated.

MEET OUR CONTRIBUTORS

Charles Hulse, M.D., Tulsa, is the co-author of "Primary Renal Neoplasms" appearing in this issue of the Journal. Dr. Hulse was graduated from the State University of Iowa College of Medicine in 1939. Limiting his practice to his specialty, urology, he is a member of the American Urological Association, South Central Section. Before coming to Tulsa, he served a residency in urology at the University Hospital, Iowa City, Iowa.


K. F. Swanson, M.D., Tulsa, is the joint author of "Primary Renal Neoplasms" in the May Journal. Graduating from the State University of Iowa in 1927, Dr. Swanson limits his practice to his specialty, urology. He is a member of the American Urological Association.

Averill Stowell, M.D., Tulsa, wrote "The Role of the Cervical Sympathetics in the Treatment of Pain" which appears in this Journal. Dr. Stowell was graduated from Johns Hopkins in 1938 and limits his practice to his specialty of neurosurgery. He has been certified by the American Board of Neurosurgery and is a member of the following organizations; Association for Research in Nervous and Mental Diseases, Tulsa Neurosurgical and Neuropsychiatric Academy, American College of Surgeons, and International College of Surgeons. Before coming to Tulsa he was on the staff of the Cleveland Clinic, Cleveland, Ohio, and the staff of the Johns Hopkins Medical School, Baltimore, Maryland.

Jack W. Barter, M.D., Shawnee, wrote "Induction of Labor" in the May Journal. He was graduated from the Baylor University School of Medicine in 1943. Active in several medical organizations, he is a past president of the Pottawatomie County Medical Society and is president-elect of the Oklahoma Academy of General Practice.

Laman A. Gray, M.D., Louisville, Ky., guest speaker at the Annual Meeting in 1948, wrote the article "The Surgical Treatment of Endometriosis," in this issue of the Journal. Dr. Gray was graduated from Johns Hopkins Medical School in 1932 and limits his practice to gynecology. He is a member of the Central Association of Obstetrics and Gynecology, American Society for the Study of Sterility, Kentucky Obstetrics and Gynecology Society, American Urological Association, Southeastern Section, and has been certified by the American Board of Obstetrics and Gynecology.

J. A. Rieger, M.D., Norman, has a paper on "A Resumé of Insulin Shock Treatment at Central State Hospital" in this Journal. Dr. Rieger, who is on the staff of Central State Hospital, was graduated from the University of Oklahoma School of Medicine. A member of the American Psychiatric Association, he limits his practice to his specialties, psychiatry and neurology.



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1. Orgain, E. S.: The Treatment of Congestive Heart Failure, North Carolina M. J. 8:125 (March) 1947.

*Searle Aminophyllin contains at least 80% of anhydrous theophylline.

President's Page

It is with mingled feelings of relief and regret that I contemplate the end of this year in which I have been privileged and honored to serve the Oklahoma State Medical Association as its President.

Only those who have so served before me can fully understand the feeling of relief. The responsibility is indeed a great one and becomes even greater every year. If that responsibility has been met in the past year it has only been possible as a result of the whole-hearted cooperation and confidence which has been accorded to me by the individual members of this Association who are striving so hard to meet the medical needs of the people of the State of Oklahoma.

My regrets are that the requirements of every day life and the limitations of time itself did not permit my rendering a fuller and better service in the interests of the profession which I hold so dear.

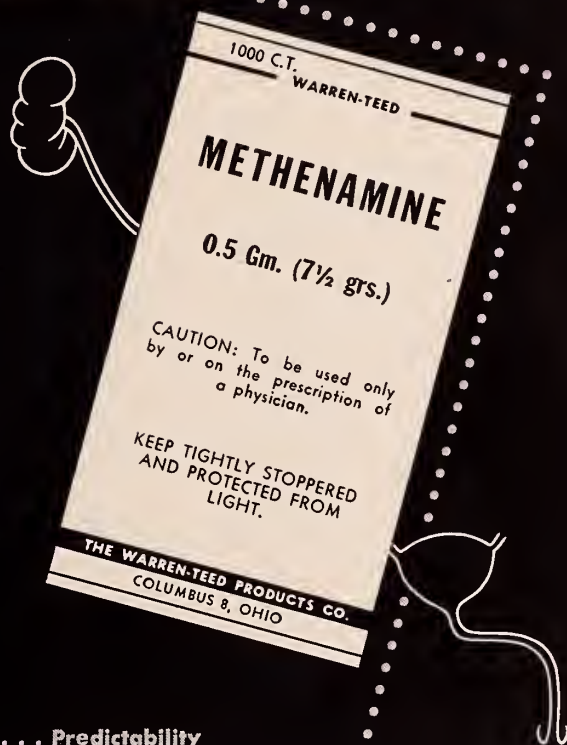
There is now every indication that my successor will have added burdens which have not existed during this past year but they are not his alone. They are the responsibilities of the members of this Association. They are responsibilities which he can discharge most effectively only to the extent to which each individual member is willing to accept his own small portion of the over all burden and add the weight of his thinking and influence to the many problems as they arise.

It is with utmost confidence that I look to the future of the medical profession in this state, having learned in the past year that every member has something to contribute for the benefit of all.

C. E. Northcutt

President.

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Special Article

THE ART OF MEDICINE IN RELATION TO THE PROGRESS OF THOUGHT*

COMMENTS *by*

A. S. RISSE, M.D., F.A.C.S.

BLACKWELL, OKLAHOMA

In eight brief chapters, covering less than 50 pages, the author gives an interesting bird's eye view of the progress of medicine in its relation to the thinking and life of man, and he makes some observations which are of special importance to American physicians now threatened with the tragedy which has already come upon our English colleagues.

The author presents a brief review of "the three great periods of the past in medicine, that he may devote most of his essay to 'modern medicine in relation to current thought.'"

In addition to the introduction, his section subjects are as follows: the Hippocratic Period, the Renaissance, the Last Hundred Years, the New Conception of Disease, Preventive Medicine, Principles of Treatment, the Mind in Relation to Disease, Medicine and Modern Life.

The author states that the "Hippocratic Period" runs from the sixth century B.C. to the death of Galen at the end of the second century of the Christian era. He credits the great physicians of the Hippocratic school with three great contributions: 1. Knowing little physiology and less of the causes of disease, they emphasized the integration of the functions of the body as a whole, and regarded disease as a disharmony of the body or mind. But their great achievement was in making and keeping careful records of their cases, records which are remarkable for their accuracy and detail. Thus these Greek physicians laid the foundation for the observational method in the study of natural phenomena, whereby they contributed greatly to the study of science in general, and so to the progress of human thought.

2. Against the corrupt background of temple medicine, in the decadent mythology of the Greek religion, and in the pre-Christian era, they adopted the best moral standards of the age, as reflected in the life of Socrates and the philosophy of Plato, and laid down in the ethical code for the practice of medicine which survives today and which is exemplified in the "Hippocratic Oath."

3. The third contribution of Greek medicine was that it established the idea of the physician as a necessary aid to living in human society. Systematic observation was extended by Aristotle to almost the whole of the natural world. He dissected animals before Herophilus began to dissect the human body, studied their modes of reproduction and so founded comparative anatomy. Plato contended that the brain was the physiological basis of the mind, and Aristotle's main influence on thought was to correlate Plato's idea of the soul which he postulated—with the physiology of the body. The first medical school at Alexandria was established on the basis of Aristotle's system of natural philosophy.

Galen's great service to the progress of thought was to popularize the teachings of Aristotle and Plato. He saw in the beauty and perfection of the human body everywhere, evidences of a Great Designer; and, breaking away from the stoic philosophy of Zeno, he helped to prepare the world for the acceptance of the idea of individual moral responsibility, and the Christian interpretation of life. Galen's teleological teaching was naturally attractive to the protagonists of the Messianic faith who preached a Trinity of Three Persons, individual responsibility, original sin and redemption by grace. It thus came about that to the time of Galen's death in 200 A.D.—the end of the classical period—the power of mind over body became greater than at any other period in the history of the world. The saints and martyrs suppressed pain and fear in spiritual exaltation to a degree which has never since been achieved.

The period of the Renaissance, beginning in 1543 when Vesalius published his "Fabric of the Human Body," includes Harvey and his discovery of the circulation of the blood, the work of Malpighi, Sydenham, Stahl and Descartes with the publication of whose book on human physiology in the 17th century the period closes. It includes also Leonardo, the painter-scientist, Copernicus, Galileo, Kepler, Boyle and Mayo, the philosophers Locke, Berkeley, Hume and Kant, who, the author holds, "made little contribution to thought which the ordinary man could understand." And, though surgery advanced rapidly throughout this period, "medicine cannot claim to have made any particular contribution to human thought."

The third period covers roughly the last hundred years, and by implication, the author finds much in the development of medicine which contributed to the progress of thought. Following the invention of the microscope by Leeuwenhoek and his successors, Schleiden and Schwann showed the cell to be the unit of life. Then followed Virchow with his cellular pathology, Pasteur's disproof of "spontaneous generation" and his demonstration of the specific action of ferments, and proof of the bacterial cause of many diseases. Then came Lister's utilization of these discoveries to perform antiseptic and aseptic surgery, with the consequent great reduction of the mortality, aided later by the discovery of anesthesia which made surgery less dreaded and less deadly; Darwin's "Origin of Species," Mendel's work on genetics; DeVries' work on mutation and the discovery of the chromosomes opened a broad field for the study of the genes in the field of heredity. Pavlov's work on conditioned reflexes and Freud's on the subconscious mind laid the basis for a better understanding of the human mind and its disorders. Here also came Conrad Roentgen and his discovery of the x-ray, which has visualized so much of man's physical structure and functions, Ehrlich and his dream of chemotherapy being realized, the discovery

*A lecture in the History of Science Courses in the University of Cambridge by A. S. Clark-Kennedy, M.D., F.R.C.P., Physician to London Hospital and Dean of the Medical School. New York, The MacMillan Company, Cambridge, England: At the University Press, 1945.

of the sulfonamides, penicillin, and streptomycin, the expanding knowledge of the viruses and viral diseases, the tremendously widening field of surgical procedures, the discovery of insulin, the broadening knowledge of the vitamins and endocrines. This is a time bewilderingly rich in medical advances which have contributed to the progress of thought. They are conditioning human life,—but Dr. Kennedy closes the section with this statement, “The absolute laws which determine the development and maintenance of life remain to be discovered.”

In the short section on Preventive Medicine, Dr. Kennedy stresses the need of education on the part of the people to insure the success of preventive measures. He considers the problem of prevention of disease from three points of view, namely, genetic endowment; education and the use of free will; and the control of environment.

The author discloses “education is necessary to insure that free will will utilize the opportunities of a controlled environment to secure physical health and the development of personality. Improvement in moral and intellectual standards is also necessary.” Here the author makes a significant observation, “A certain amount of stress, strain and risk is necessary for the maximum development of human character.” “Life,” he says, “can be too comfortable to promote health, and too soft for the development of personality. Moreover, the elimination of all risk would seriously curtail individual liberty and freedom.” (Advocates of compulsory medical care please note.) Dr. Kennedy ends this section with an interesting and perhaps prophetic observation. Speaking of the freedom which physicians enjoy in their methods of prevention of pain and suffering and the prolonging of life by medical means he adds, “At the moment we are free to exercise our own individual judgment in these cases. But it must be remembered that if at some future date the medical services of the country are organized by the state, these problems may assume more difficult proportions.”

The brief chapter on “Principles of Treatment” has in it little that is new. Pathology and etiology must both be considered and the author grants that the treatment of the underlying cause of the disorder is often most difficult, but that in this respect there have been remarkable advances in recent years. The author cites briefly our modern armamentarium, various drugs, especially the sulfonamides, the endocrines, insulin, the vitamins, vaccines and serums, penicillin, the x-rays and radium for the treatment of malignancy, and remarks that it is not impossible that chemotherapeutic agents for the treatment of malignant diseases will yet be discovered. He admits that, “At present there is no known method of inhibiting the degenerative processes in arteries which are frequently associated with high blood pressure,” and closes the section with these words, “Every advance in medicine creates a new problem in medical practice, education and administration. If a comprehensive medical service is to become free and available to all, and is not to be abused, it is essential that the general public and those responsible for the organization of the medical services of the country should be better informed on the problems of medicine than they have been in the past.”

In the section, “The Mind in Relation to Disease,” Dr. Kennedy holds that no conception of disease is complete, nor any principles of prevention or treatment correct, which do not recognize the reactions of the mind to the environment. On the other hand the author insists that, “common sense nevertheless allows every individual a modicum of free will which enables him

to rise superior to circumstance, break tradition, defy convention, or exercise moral, esthetic or intellectual judgment.” He adds that, “the psychoneurotic temperament is particularly important in medicine,” and frequently causes nervous symptoms so similar to those of true organic disease that it makes clinical diagnosis difficult, and mistakes in either direction are not uncommon. He discusses briefly Freud’s brilliant work in psychoanalysis, admits it has some dangers, asserts that “many patients who have been submitted to psychoanalysis never have the same confidence in themselves again.” “Psychoanalysis,” he adds, “is also too elaborate to be of general use, and, in the majority of cases, we have to rely on persuasion and the application of external discipline. This method does not entail any loss of that self-confidence which is so important to retain.” The author notes that the modern tendency in psychiatric treatment is moving away from psychotherapy, and in the direction of what he names “empirical interference” with the normal structure and function of the brain by the “shock treatment” with drugs such as metrazol or insulin or electricity, prolonged artificial sleep induced by narcotics, and lobotomy for selected cases of schizophrenia. The author credits Freudian psychology with having attracted a wide general interest and in “having a large effect on modern thought, education, and way of life which extends far outside medicine. It raises the question of moral responsibility in a most disconcerting way. It does not exclude and certainly does not disprove the existence of free will, nor a capacity for moral and intellectual judgment, independent of upbringing, education or experience which, he says, is sometimes forgotten by the amateur psychologist and teacher.” The author closes the chapter with this observation, “It is probable that psychology, leaving out of account the possibility of something introduced and influencing the mind from without, and tending to ignore the freedom of the will, gives only a partial explanation of the working of the human mind.”

In the closing section, “Medicine and Modern Life,” our author states he is not convinced that modern medicine is influencing thought sufficiently at a time when recent spectacular advances in medicine are creating altogether new problems. One reason, he holds, is that “specialization seems to be undermining the integration of medicine as a whole. Everything except science has long been crowded out of the curriculum”—yet a purely scientific education is inadequate for the profession of medicine, and medical education is losing touch with the humanities at a time when the power of medicine to influence human life is greater than at any time in history. “Medicine has certainly not been sufficiently at the disposal of the general public in the past.” Yet the author is fearful of the increasing power of medicine, freed perhaps from independent opinion and harnessed to the state, to control human life through social and political propaganda, and to dominate human minds through the current and possibly fashionable psychiatry of the day. The greater the growing power of medicine, the more often will medicine be confronted by moral issues, and with increasing frequency will problems now decided mainly on an ethical basis come to be settled entirely on grounds of medical judgment or political expediency. For even in medicine the interests of the individual may conflict with the welfare of the state. For in politics, the principle of individual freedom is in conflict with the demand for increasing state control of liberty.

We live in an age when scientific knowledge has outrun philosophy. Narrow specialization is the order of the day; religion has largely ceased to be a unifying force in education; belief in the Christian revelation seems to have declined, and excessive anxiety over the health of the body has replaced preoccupation with the welfare of the soul. Medicine must widen into a large understanding of human life and its interpretation.

"The rift in University education seems to have grown too great. It must grow no greater. The balance of our system must somehow be restored." The art of Medicine is unique in that it has to deal with human personality, human life, human hopes, human fears, human failings, in conjunction with the material human body which is liable to so many disasters in the physical environment of our existence. In Medicine things spiritual and things material are seen in conjunction with each other. Hence medicine could and medicine should be the connecting link, reconciling the conflicting points of view of the humanities on the one hand and the sciences on the other. A purely scientific edu-

cation is inadequate for a profession which deals with so close a relationship between mind and matter. Yet philosophy has dropped out of medical education, and the tragedy is that medical education seems to trail along after a "half-baked" materialism which is already out of date, in an age when medicine could and medicine must help to integrate the arts and sciences in university education, if our sense of proportion is to be once more restored, and medicine continues to perform its highest functions in society. Unless this can be done, we run the risk of losing our intellectual balance and our spiritual understanding of the mysteries of the human mind and human personality. These are not material, but they are nevertheless real in our experience. "Let it be remembered," the author says, "medicine has not yet eliminated and probably never will 'debunk' the human soul."

The author indicates that in our privilege of handling the biological phenomena of death we come into closest touch with the spiritual aspects of human life. And yet, he adds, "To the interpretation of this recurrent riddle medicine makes no contribution."

'A DOCTOR OF THE OLD SCHOOL'*

BY EDITH JOHNSON

Year after year the late Alexander Woolcott believed it to be a part of his job on earth to broadcast the story of "A Doctor of the Old School" included in Ian Maclaren's book of sketches, "Beside the Bonnie Briar Bush," a story that inspired the production of an extraordinarily fine moving picture, "The Hills of Home."

William MacLure, so the story goes, practiced among the people living in and around Drumtochty, the only physician in that part of Scotland where at the risk of his life he rode horseback into a rugged glen and over treacherous bog. There he did his best for every man, woman and child in this wild, straggling district, in heat and in snow, in dark and in light without rest or holiday for 40 years.

Although one horse could not do the work of this man the doctor liked best to ride his white mare, Jess—she was almost human. Before and behind his saddle were strapped the instruments and medicines he might want for he never knew what was before him. As there were no specialists in Drumtochty the doctor had to treat everybody for everything as best he could. "He was chest doctor and for every other organ as well. He was accoucher and surgeon. He was oculist and aurist. He was dentist and chloroformist, beside being chemist and druggist."

Dr. MacLure was a tall, gaunt, loosely made man, "But what a clever hand was his in an operation, as delicate as a woman's. And what a kindly voice was his in the humble room where the shepherd's wife was weeping beside her man's bed." Although he was "ill put together" his physical defects were the penalties of his work and endeared him to the glen. That ugly scar cut into his right eyebrow he got one night when Jess slipped on ice and laid him insensible eight miles from home. His limp marked a big snowstorm when his horse missed the road and fell and they rolled together in a drift. These were honorable scars and for such risks of life as men in other fields get the Victoria Cross.

Tammas Mitchell was a "dull man who could not read the meaning of a sign." But "love was eyes to him and a mouth" when Dr. MacLure stood at the bedside of his wife, Annie as her life was slowly ebbing away.

"Wull Annie no come through?" asked Tammas and

looked Dr. MacLure straight in the face — this doctor never flinched his duty.

"It's a sair business," replied the doctor, "but ye'll play the man and no vex Annie. She's dae her best, a'll warrant."

As the doctor rode away and pondered the fact that money might buy life for Annie after all, he said to Jess, "We'll go and see Drumsheugh. He's kinder than folk know."

"Annie's dyin' and Tammas is like to break his heart," he told his old friend.

"Is she clean beyond ye?" asked Drumsheugh.

"Beyond me and every other in the land but one and it would cost 100 guineas to bring him."

"A hundred or no hundred, we'll have him," said Drumsheugh, a lonely man not given to handing out money.

"You're the man I counted on, Drumsheugh, but you'll grant me a favor. You'll let me pay half, bit by bit. I want to have a share in saving Annie's life."

So the queen's surgeon came and was brought to Annie's bedside. And when his bag was brought to him the next morning and Dr. MacLure laid a check beside it the surgeon picked it up and said, "I were on the gossip last night and I know the whole story about you and your friend." And the check fell in 50 pieces on the floor.

Like so many doctors who have given themselves body, mind, heart and soul to the healing of the sick, Dr. MacLure ripe in years, grew weary and sick and took to his bed. As he lay there he sent for his old friend, Drumsheugh, begging him to stay with him. With his hand in Drumsheugh's he said "Could you put up a bit of a prayer, Patrick?" Then his mind went back to his boyhood and he murmured "Give me a kiss, nither, and I'll soon be asleep." And the peace on the doctor's face was that of one who rests from his labors.

Twelve feet of snow covered the glen. But as the doctor had fought storms to go to the people so the people came to pay a last tribute to William MacLure. It was an old man, now feeble, who spoke for them, as he said,

"Come, ye blessed of my Father—I was sick and ye visited me."

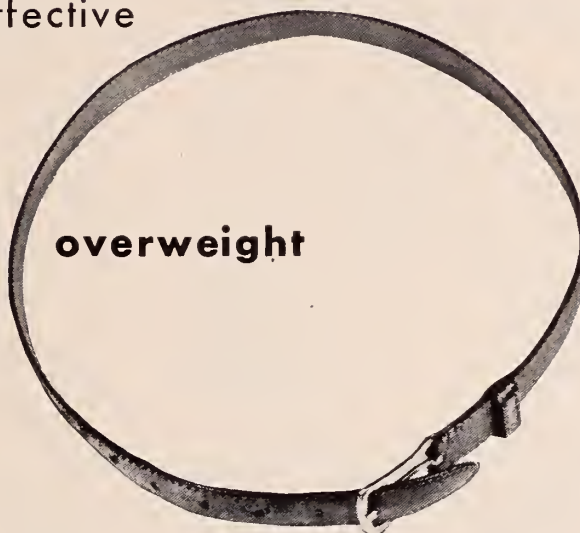
A week later Jess, taken into the care of Drumsheugh, pining for her master laid down and died.

*Reprinted from the Daily Oklahoman March 29, 1949.

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PUBLIC RELATIONS REPORTER

LOOKING BACK

At press time more than half of the state's County and District Medical Societies had appointed Public Policy Committees to carry out the campaign against compulsory health insurance as outlined by the O.S.M.A. Public Policy Committee and the A.M.A. National Education Campaign. It is hoped this organization will be 100 percent by the time this issue of the Journal is out. Meetings of these committees in each Councilor District are being held to implement the program. The committee activities will include arranging for speakers on compulsory health insurance before civic groups, stimulating local publicity, and distributing literature and information to physicians in the area.

County and District Medical Societies are nearing the 100 percent mark in adopting resolutions against compulsory health insurance and sending copies of these resolutions to President Truman and Oklahoma Congressmen.

The Public Policy Committee's News Letter was resumed on April 1. The News Letter is mailed to every member of O.S.M.A. and will devote much of its space to keeping the membership posted on developments in the campaign against compulsory health insurance.

Speeches on compulsory health insurance have recently been given by members or representatives of the Association to civic clubs and other lay groups throughout the state. Bartlesville, Enid, Oklahoma City, Tulsa, Miami, Lawton, Ponca City, Woodward and Putnam City are among cities where an effort to acquaint the lay public with the dangers of this form of socialization is already under way.

LOOKING FORWARD

Plans are being made for an outstanding O.S.M.A. exhibit for the state fairs at Tulsa, Oklahoma City and Muskogee. The Public Policy Committee also is studying plans to make such exhibits available for the larger county fairs.

FOR YOUR ADDRESS BOOK

When you suggest that patients, associates and friends write President Truman and Oklahoma Congressmen to protest against the enactment of compulsory health insurance legislation, they may ask you "How do I write them?" Here are the correct addresses:

President Harry S. Truman
White House
Washington, D. C.

The Hon. Elmer Thomas
United States Senator from Oklahoma
Senate Office Building
Washington, D. C.

The Hon. Mike Monroney
Representative from Oklahoma
House Office Building
Washington, D. C.

Oklahoma's other members of Congress are Senator Robert S. Kerr; Rep. Dixie Gilmer, Dist. 1; Rep. William G. Stigler, Dist. 2; Rep. Carl Albert, Dist. 3; Rep. Tom Steed, Dist. 4; Rep. Toby Morris, Dist. 6; Rep. Victor Wickersham, Dist. 7; and Rep. George Howard Wilson, Dist. 8.

A LESSON FROM HISTORY

Political plans for medical and hospital care are more than 100 years old. They have never succeeded, anywhere, any time. They always cost the people progressively more, but render less and less service. Such a program began in Germany in 1855 with an annual tax of \$13.77 per member. By 1929, the cost had risen to \$99.24 per capita. The English plan calls for payment of \$4 per month by everyone more than 16 years old. This is \$48 per year, almost \$200 for a family of four. Yet current news dispatches bring word that at the end of the first nine months of the National Health Service, the plan is running heavily in the red. The House of Commons has approved a supplementary appropriation of \$211 million for this period. The original estimate for the program was \$558 million.

AN ARMY OF BUREAUCRATS

Estimates of the number of routine clerks, typists and administrators that would be employed to man the bureaucracy for compulsory health insurance if proposed legislation becomes law runs into appalling figures. Dr. Ernest Irons, A.M.A. president-elect, recently said "On the basis of German experience, there will be added to the government employees 1,500,000 more payrollers. The worker already parts with 20 to 30 per cent of his wages through hidden and payroll taxes, and compulsory medicine will take still more from him for a service of dubious quality."

"ARCH OF DESPAIR"

Almost every speaker and writer on compulsory health insurance refers to the quotation of Lenin, the Communist demi-god, that "Socialized medicine is the keystone to the arch of the Socialist State." Cartoonist Rube Goldberg drew on this quotation for a recent NEW YORK SUN cartoon which pictures an arch inscribed with the quotation and flanked by a sign saying "Good Americans Detour." Caption for the cartoon is "Arch of Despair."

WORDS OF WISDOM

Dwight D. Eisenhower said recently: "When financing of schools or hospitals or charitable works is turned over to the federal government, you get bureaucracy and this is the approach to statism."

TESTIFY IN WASHINGTON

At the invitation of Senator Claude Pepper, representatives of O.S.M.A. appeared in Washington before the sub-committee of the Senate Committee on Labor and Public Welfare holding hearings on veterans hospital construction. The association's testimony was given by Austin H. Bell, M.D., Oklahoma City, and Dick Graham, Executive Secretary.

OCCUPATIONAL HAZARD

In Derby, England, a coroner's verdict of suicide was returned in the morphine death of a dentist who left a note saying "All these dental forms are driving me insane."

FILM WILL BE AVAILABLE

A \$75,000 film which will portray and dramatize the A.M.A.'s contributions to the health of the American people has been approved by the Board of Trustees of the American Medical Association. The film will be produced by Louis du Rochemont studios, former producer of "The March of Time" and such documentary films as "Boomerang" and the "House on 92nd Street." The running time for the film, scheduled for completion in six months, will be 23 minutes and it will be made available to state and county medical societies and to individual doctors.



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GENERAL NEWS

INTERNAL MEDICINE INSTRUCTOR NAMED

The Oklahoma State Postgraduate Committee, in full attendance, met Sunday, March 6, 1949. Robert M. Becker, M.D., of Boston, Massachusetts, came before the Committee as applicant to be considered for the position of instructor in Internal Medicine. After thorough discussion with Dr. Becker, the Committee is pleased to announce that he has accepted the instructorship in Internal Medicine.

Doctor Becker graduated from High School at Hammond, Indiana in 1936. He attended the University of Oregon, Eugene, Oregon and the Oberlin College, Oberlin, Ohio, where he received his B.A. Degree in 1939. Following this he studied at the University of Chicago School of Medicine, Chicago, Illinois, where he received his M.D. Degree in June, 1943. While a medical student he worked as Research Assistant to C. Phillip Miller, M.D., Professor of Medicine concerning research in Infectious Diseases; working with problems directed toward enhancing antigenicity of meningococcus and gonococcus. He served his internship in the Los Angeles County General Hospital, Los Angeles, California, in 1943 and 1944.

From June, 1944 to June, 1946, Doctor Becker was on active duty with the U.S. Naval Reserve, serving overseas on Guadalcanal, Okinawa, Guam, and Tsingtoot,

China. He received the Bronze Star and Presidential Unit Citation for the Okinawa Campaign.

Doctor Becker entered the University of Chicago Clinics as a Resident in Medicine in July, 1946, where he did clinical, teaching, and research work until June, 1948. From July, 1948 to the present time he has been a Resident in Internal Medicine at the Joseph H. Pratt Diagnostic Hospital (Tufts College of Medicine) Boston, Massachusetts, where he has also been teaching groups in the Postgraduate Division.

Robert P. McCombs, M.D., Director of the Postgraduate Division, Joseph H. Pratt Diagnostic Hospital, Boston, and who formerly taught a two-year postgraduate course in Internal Medicine in the state of Tennessee, recommended Doctor Becker to us, and is giving his unstinted cooperation to the promotion of this course.

The Postgraduate Committee, after several months of search, is pleased in being able to obtain an instructor with the proper background, teaching ability, and combined with a most pleasing personality. The Committee looks forward to two years of stimulating teaching in Internal Medicine throughout the state.

The first Circuit will open in Northeastern Oklahoma the week of July 18, with Miami, Vinita, Claremore, Bartlesville and Pawhuska as the teaching centers.

ONE OUT OF TWO FOREIGN GRADUATES FAIL U.S. EXAMS

Of the 14,250 foreign medical school graduates examined in this country from 1930 through 1947, 6,973 of 48 per cent, failed to pass, according to figures released by the Congress on Medical Education and Licensure. Among the foreign graduates who failed in their examinations during that period were some American students who had gone to Europe for their medical education and returned here expecting to practice.

The above figures were brought out by Creighton Barker, M.D., executive secretary of the Connecticut State Medical Society and secretary of that state's examining board, at the 45th annual Congress on Medical Education and Licensure in Chicago.

Dr. Barker said the future is very dangerous because of two factors. "One is the tremendous present enrollment in German medical schools. How these new thousands of physicians can be absorbed into the economy of a bankrupt and all but ruined country is impossible to understand.

"The other matter of concern is the ruling of the veterans' administration that American veteran students may use their allowances under the GI bill to obtain education, including medical instruction, in foreign schools. Veteran graduates so trained are not eligible for licensure when they return."

CLAPPER MEMORIAL HOSPITAL OPENED IN WAYNOKA

Dedicated March 20, the E. P. Clapper Memorial Hospital at Waynoka is now formally opened to the public. George H. Garrison, M.D., O.S.M.A. president-elect, was principal speaker at the dedication ceremony. He was introduced by O. C. Newman, M.D., Shattuck, life long friend of the late Dr. Clapper.

An active campaign has been conducted in Waynoka for the last 10 years to build the hospital. In the fall of 1945 definite steps were taken, committees appointed and investigations made. A special election to vote \$90,000 in bonds was held March 4, 1947. Work began on the hospital April 15, 1948.

The building, modern in design, is a one floor north and south wing plan. Exterior of the building is finished in cream colored face brick veneer. The hospital has all modern facilities including x-ray room, radiant heating, fluorescent lighting, well equipped operating room, modern kitchen equipment and complete laboratory.

Dr. Clapper, for whom the hospital is named, came to Waynoka from Nebraska in the early 1900's and served the community for almost 40 years. At one time he was named Waynoka's most useful citizen. The dedication of the memorial hospitals fulfills an early dream of the pioneer physician for a municipal hospital. Dr. Clapper died in 1943.

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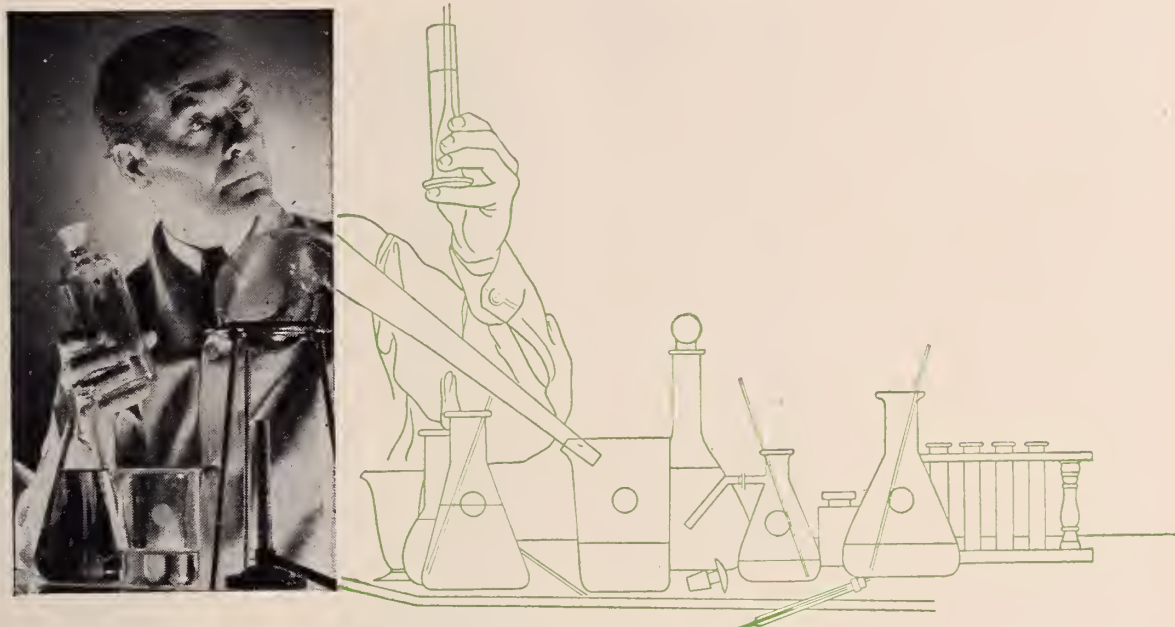
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FIFTY YEAR PIN AWARDED POSTHUMOUSLY

Lasting tribute to a deceased O.S.M.A. member was made when members of the Lincoln County Medical Society awarded a recent Fifty Year Pin posthumously. The pin was given to Mrs. Frank H. Norwood of Prague, widow of the late Dr. Norwood, who died while plans were being made by his county society for presentation of the gold lapel pin earned by those members of the medical profession practicing for 50 years or more. The pin was presented in a quiet ceremony in the family home March 1.

Dr. Norwood was born in Columbia, Missouri, December 29, 1872. He finished elementary school in Columbia and was graduated from the University of Missouri in 1898. The following year he began practicing medicine in St. Louis, Missouri, where he remained two years. His former roommate at medical school, Dr. A. M. Marshall of Chandler, convinced him that he was needed in Oklahoma Territory and that there were great opportunities here and in 1900 he came to Oklahoma and began practicing in Parkland.

It was in Parkland that he met his future bride, Miss Madge McDowell. Two years later he moved to the new pioneer town of Prague. From 1903 to 1904 he did post graduate work at Columbia University in New York City. Returning to Prague, he practiced there until his death December 2, 1948.

Dr. Norwood was County Health Officer during the greater part of his 48 years in Lincoln County. He served in the first World War and was active in the American Legion as service officer. He was a delegate to the national meeting of the American Legion in 1919.

He continued to keep up with the advances in medicine through reading until his death. Respected by his associates, he was a master of the art of "turning the

other cheek" when someone wronged him. Fellow physicians speaking of him recall Dr. Norwood as having an unlimited reserve of patience, tolerance and good will.



BOOK REVIEWS

DOCTORS OF INFAMY. Alexander Mitscherlich, M.D. and Fred Mielke. Introduction by Andrew C. Ivy, M.D., and a note on Medical Ethics by Albert Deutsch. New York. Henry Schuman. 172 pages. 16 pages of photographs.

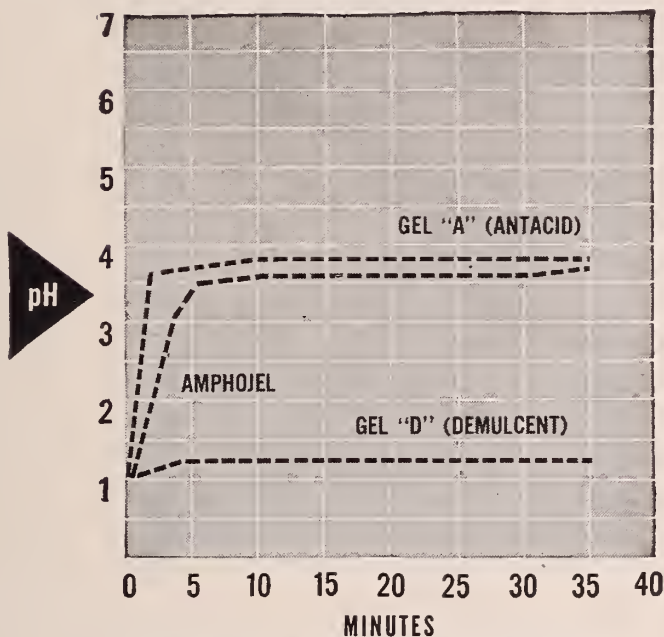
This amazing story of the Nazi medical crimes plainly shows to what depths the profession of medicine may descend under complete government control when the government high-ups are obsessed with the idea of a super race seeking its place in the sun. Though the story is hard to believe, there can be no doubt of its authenticity. It is stamped with the approval of our own Andrew C. Ivy, U. S. Brigadier General Telford Taylor and Dr. Leo Alexander who was consultant to the Secretary of War and to the Chief of Council for War Crimes. Also the shocking truth is perhaps further substantiated by the fact that the German authors suddenly disavowed the American edition which they had previously authorized. In the opinion of the reviewer this is not surprising since the contents of the book stand as one of the most serious indictments ever

recorded against any profession or any nation in the history of the world. Carnivorous animals in the jungle and on the desert hard pressed for food and water have an enviable record for kindness and consideration as compared to the German people who deigned to do the bidding of the Reich leader SS. Himmler. This 172 page record of the most inhumane crimes in the recorded history of humanity, with its illustrations and its note on medical ethics, might be declared "must" reading for the medical profession.

Just at this time when our own New Dealers drunk with power dare to write a ten year prescription that would place physicians under orders, we underscore the "must."

It is well for every physician in the State Medical Association to know what happened under Hitler and to cogitate upon the fact that what happened in Germany can happen here.

The book is of such a character it cannot be adequately discussed in the limited space allotted the reviewer. It must be read.—Lewis J. Moorman, M.D.



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ANNOUNCEMENTS

AMERICAN MEDICAL ASSOCIATION. Annual session, June 6—10, Atlantic City, New Jersey.

OKLAHOMA STATE MEDICAL ASSOCIATION. Annual Meeting, May 16, 17, and 18. Mayo Hotel, Tulsa, Oklahoma. House of Delegates meeting Sunday, May 15.

OKLAHOMA UNIVERSITY SCHOOL OF MEDICINE ALUMNI ASSOCIATION. Annual Banquet, Ivory Room, The Mayo, Tulsa, May 16, 6:30 p.m. For further information write Lee K. Emenhiser, M.D., 1207 Medical Arts Building, Oklahoma City.

COOK COUNTY GRADUATE SCHOOL OF MEDICINE. A two weeks' intensive personal course in the "Diagnosis and Treatment of Congenital Malformations of the Heart" will be offered by Benjamin M. Gasul, M.D. starting Monday, June 13. A two weeks' intensive personal course in "Cerebral Palsy" will be offered by M. A. Perslstein, M.D., starting Monday, August 1.

AMERICAN CANCER SOCIETY. A new film, titled "Cancer: The Problem of Early Diagnosis" has received the approval of the American Medical Association's committee on medical motion pictures, and is now available to the medical profession through more than 50 distributing points.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, INC. The general oral and pathology examinations (Part II) for all candidates will be conducted at Chicago, Illinois, by the entire board from Sunday, May 8 through Saturday, May 14. Hotel Shoreland in Chicago will be headquarters. Further information can be obtained from the American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pa.

AMERICAN COLLEGE OF CHEST PHYSICIANS BOARD OF EXAMINERS. Announcement is made that the next oral and written examinations for fellowship will be held in Atlantic City, June 2, 1949. Candidates should contact the Executive Secretary, American College of Chest Physicians, 500 North Dearborn St., Chicago 10, Ill. The 15th Annual Meeting of the American College of Chest Physicians will be held at the Ambassador Hotel, Atlantic City, June 2-5.

AMERICAN ASSOCIATION OF RAILWAY SURGEONS. Sixty-first annual meeting will be held at the Drake Hotel, Chicago, Ill., June 30—July 2.

SUMMER CLINICS OF THE CHILDREN'S HOSPITAL. Summer Clinics at the Children's Hospital, Denver, will be held June 29, June 30 and July 1. Further information can be obtained from the Chairman, The Summer Clinics Committee, Children's Hospital, Denver, Colo.

DO YOU KNOW?

That Alfalfa and Cotton Counties were the first two County Medical Societies to report their \$25.00 A.M.A. special assessment for their entire memberships 100 per cent? The two counties were the only ones that had come in 100 per cent at Journal press time.

MEDICAL SOCIETIES AROUND THE STATE

HUGHES COUNTY

Two Ada physicians had charge of the regular program when the Hughes County Medical Society met in Holdenville for the March meeting. William T. Gill, M.D. and John B. Morley, M.D. were the guest speakers.

WASHINGTON-NOWATA

Members of the Washington-Nowata County Medical Society were guests at a recent meeting sponsored by Rexall stores in that area. The program featured James DePree, vice president of the DePree Chemical Company who spoke on the latest developments in the treatment of anemia, pellagra, blindness and insanity and H. B. Westover, agent for the U.S. Bureau of Narcotics, who discussed the latest government rulings relating to narcotics and barbiturates.

CARTER COUNTY

A report on the House of Delegates meeting, discussion of the preceptorship program of the Medical School and the blood bank were brought up at a recent Carter County Medical Society meeting. Following the business session, a motion picture on "The Management of the Failing Heart" was presented.

TULSA COUNTY

The Tulsa County Medical Society's series of health and medical broadcasts, "How's Your Health?" are now being heard at the new time of 6:15 p.m. each Saturday over radio station KOME, Tulsa. Speakers for recent programs have included C. G. Stuard, M.D., Earl I. Mulmed, M.D., W. F. Thomas, Jr., M.D., Henry A. Brocksmith, M.D., William Buchan, M.D., and H. Lee Farris, M.D.

KAY-NOBLE

In observance of Doctor's Day, the Women's Auxiliary of the Kay-Noble County Medical Society entertained their husbands at a dinner at the Ponca City Country Club. Dick Graham, O.S.M.A. Executive Secretary, was guest speaker. George H. Niemann, M.D., Ponca City, was presented a bouquet of flowers for having practiced medicine longer than any of the other physicians in the area.

BLAINE COUNTY

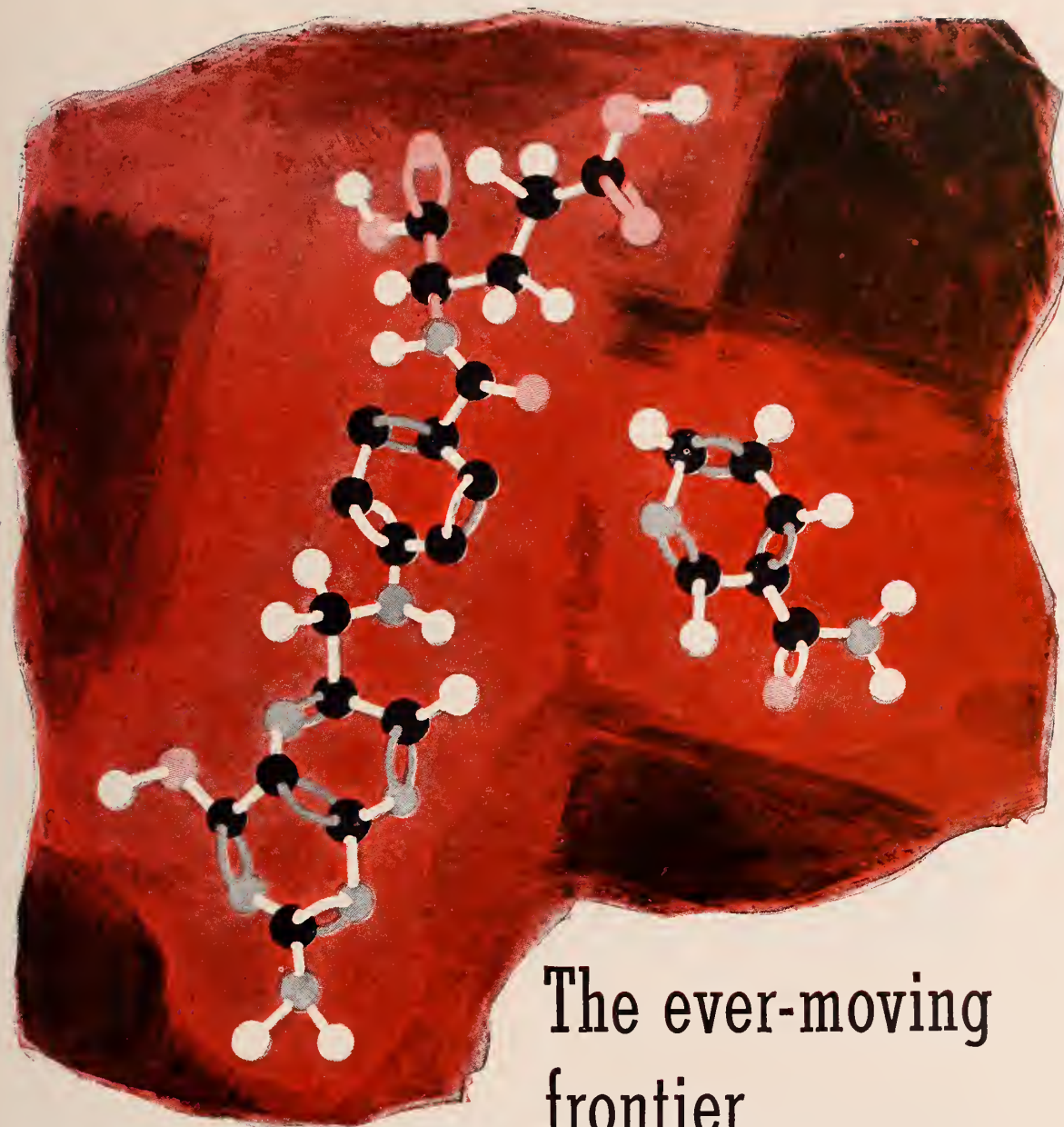
Husbands and wives of the Blaine County Medical Society were guests at the meeting March 14 at Okeene. The following officers were elected at the business session: President, W. F. Bohlman, M.D., Watonga; vice-president, Charles Rogers, M.D., Canton; and secretary, Virginia Curtin, M.D., Watonga.

KIOWA-WASHITA

A joint meeting of the members of the Kiowa-Washita Medical Society and the Auxiliary was held at Sentinel March 10. Following the dinner, the groups had separate business meetings.

GRADY COUNTY

Three Oklahoma City physicians were guest speakers at a March meeting of the Grady County Medical Society. The speakers were Turner Bynum, M.D.; Dr. Stone, chief of the medical service at Will Rogers Veterans Hospital; and George Winn, M.D., also a member of the medical staff at Will Rogers.



The ever-moving frontier

Research on vitamin knowledge in the field of nutrition has come a long way since the early published researches of McCollum, Mendel and Funk. The science of nutrition is no longer the stepchild of medicine, nor the poor relation of agriculture. In particular, our understanding of the need for vitamins in human nutrition has enormously increased. Vitamins constitute in the aggregate the *sine qua non* for cellular respiration, reproduction, growth and repair.

For the past 25 years, biochemists have pressed forward a continually moving frontier of scientific discovery in the field of nutrition. In recent years, *Lederle* has been in the vanguard of this movement, its investigators being well known for their achievements with folic acid, pyridoxine, biotin, the pantothenates, liver extract, and allied substances. There will be no slackening in the efforts of this organization to uncover additional aids to better health and better living.

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HAVE YOU HEARD?

O. L. Parsons, M.D., Lawton, was named president of Southwestern Clinic Hospital at the annual election of officers.

Frank A. Stuart, M.D., Tulsa, left April 20 for four to six weeks in Europe as Orthopedic Consultant to Army medical units stationed in England, France and Germany. Appointed by Surgeon-General, he will teach medical officers in the European Theater of Operations, inspect Army hospital facilities, and conduct ward rounds.

Virginia Curtin, M.D., Watonga, was guest speaker at a recent meeting in Bartlesville of the American Association of University Women.

L. R. Pace, M.D., Seminole, has been named chief of staff of the Seminole Municipal Hospital.

Ralph F. Martin, M.D. has resigned from the staff of the Tulsa Clinic to enter private practice at Sand Springs, Oklahoma.

William H. Reiff, M.D., Oklahoma City, attended a school in Washington April 4 to 8 on the medical aspects of atomic explosion. Dr. Reiff is a division surgeon with the 95th Infantry.

Leo J. Starry, M.D., Oklahoma City is the new chief of staff of St. Anthony Hospital, Oklahoma City.

Herbert S. Orr, M.D., Tulsa, was one of 10 nominated by the Tulsa Junior Chamber of Commerce as the "Outstanding Young Man of Tulsa for 1948." Dr. Orr's nomination came as a result of his work as president of the Optimist Club.

Homar A. Ruprecht, M.D., Tulsa, has been named president of the Tulsa County Heart Association, succeeding Russell C. Pigford, M.D.

Port Johnson, M.D., Muskogee, used the "Ills of Socialized Medicine" as his topic when he addressed the Muskogee Co-Operative Club.

Mark D. Holcomb, M.D., Enid, used actual chest x-rays to illustrate his speech on "Treatment of Pulmonary Tuberculosis" at the Grant County Tuberculosis Association meeting in Medford March 29.

John Lamb, M.D., Oklahoma City, spoke to the Sedgwick County Medical Society in Wichita, Kansas, March 8, on "Cutaneous Manifestations of Internal Disease on an Endocrine Basis."

Eugene Arrindell, M.D., Ponca City, was guest speaker at a Roosevelt Parent-Teachers meeting in that city.

T. H. McCarley, M.D., McAlester, was speaker at a Business and Professional Women's Club in March. Dr. McCarley also spoke on socialized medicine.

William A. Tolleson, M.D., Eufaula, has been awarded the Medal of Merit and a lapel pin by the Department of Interior for outstanding service over a long period of time in government Indian service.

Charles Ohl, M.D., Chickasha, gave a brief discussion on socialized medicine at an ABC club meeting in that city.

C. E. Cook, Jr., M.D., Cherokee, represented the Alfalfa County Medical Society at a meeting in that city concerning community Blue Cross enrollment.

Joe L. Duer, M.D., Woodward, addressed the Kiwanis club of that city on "Socialized Medicine."

Ed Fair, M.D., Oklahoma City, was guest speaker at a Methodist dinner in Blanchard recently.

G. W. Scott, M.D., Tishomingo, is chairman of the Chamber of Commerce park development committee in that city.

W. F. LaFon, M.D., Alva, attended a two weeks postgraduate course in Chicago early in the spring.

Charles Green, M.D., Lawton, used as his title, "What Footsteps Are You Leaving for Your Children," when he spoke to the Lincoln P-T-A in Lawton.

Felix M. Adams, Jr., M.D., Nowata, was principal speaker before the Nowata Lions Club when *O. L. Grigsby, M. D.* was program chairman.

O. E. Templin, M.D., Alva, was acclaimed champion "story teller" at an Alva Rotary Club meeting.

W. Floyd Keller, M.D., Oklahoma City, spoke on "The Blood Count—What It May Mean to You" at a staff meeting of the Ardmore Sanitarium and Hospital.

Lillian H. Robinson, M.D., Enid, was guest of honor and principal speaker at a meeting of the Alpha Child Study Club of Enid.

OBITUARY

E. P. ALLEN, M.D.
1883-1949

E. P. Allen, M.D., Oklahoma City, died suddenly March 25 at his home in Oklahoma City.

Dr. Allen, often called the dean of Oklahoma City obstetricians, began practicing in Oklahoma in 1913. He retired in April, 1947, but returned the following August to head the medical staff of the Oklahoma County Health Association.

A native of Temple, Texas, he took his pre-medical training at Huntsville, Texas, Teachers Institute, and graduated in 1911 from the University of Texas School of Medicine.

He was in the army during World War I and was professor of obstetrics for 20 years at the University of Oklahoma School of Medicine.

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FOR SALE: 100 MA Standard Radiographic and Fluoroscopic Unit, combination table, Bucky, etc. Complete darkroom equipment. Write Key M, care of The Journal.

FOR SALE: operating table, OB instruments, glass and metal cabinets for instruments, one steel cabinet, two sterilizing pieces, one large floodlight, office furniture. Write Key O, care of The Journal.

FOR SALE: Office furniture and equipment belonging to practicing physician who is retiring. Located in county seat town on U. S. highway, northeast Oklahoma. Write Key C, care of The Journal.

FOR RENT: For one year, doctor's office with established practice with living quarters in residential section of Oklahoma City. Write Key L, care of The Journal.

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| \$75.00 weekly indemnity, accident and sickness | Quarterly |
| \$20,000.00 accidental death | \$32.00 |
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Nervous and
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Koromex Jelly and Koromex Cream are two companion preparations for pregnancy control, assuring the patient of alternatives for individual personal preference. Time-tested Koromex Jelly and Koromex Cream...have the same active ingredients and same pH (4.5) consistent with vaginal fluids...afford necessary dependable barrier film...instantly spermicidal on contact...will not interfere with normal vaginal biology.

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ACTIVE INGREDIENTS: BORIC ACID 2.0%, OXYQUINOLIN BENZOATE 0.02% AND PHENYLMERCURIC ACETATE 0.02%, IN SUITABLE JELLY OR CREAM BASES.



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COUNCILOR REPORTS

Annual Report of Councilor, District No. 1

To the House of Delegates,
Oklahoma State Medical Association:

Due to the unusual winter and to the fact that so many roads were impassable many of the meetings were cancelled. However, I believe that, due to so much publicity, the doctors have been awakened as never before to both national and local legislation.

We had a very fine meeting early last year at Supply which was well attended. This was a regular meeting of the Northwest Oklahoma Medical Society. Dr. Day and his staff at the Western Oklahoma Hospital were wonderful hosts. The scientific program was good and much interest was shown.

We also had a meeting later in the season at Woodward with a fine meeting and social hour planned. But unfortunately, a storm came up and because many of the doctors had to leave in order to get home before the roads were blocked, the meeting was called off.

I have attended several meetings of the County Societies. The main interest at each of these meetings concerned the present trend toward socialization of our profession. Due to the Truman compulsory health program and the Ewing reports and his endorsement of all the socialization ideas which have invaded every branch of free enterprise, including medicine, the doctors are aroused as never before. It seems that they are getting their eyes open. We only hope that it is not too late to save our constitutional way of life.

I have found that most of the doctors are willing to go along with the A.M.A. in the assessment, but they also want to know how the money is going to be spent. However, I feel that we must trust each other and fight as never before.

Much interest is also being shown in the idea proposed by the Oklahoma University School of Medicine in regard to preceptorships. Everyone is willing to help in putting the program over and I feel sure that it is a step in the right direction in bringing medicine to the people instead of it being necessary for the patients to seek doctors in the metropolitan areas. In this way the public will learn that the members of the medical profession have the people's interest at heart.

Let's all vow that we will each of us put our shoulders to the wheel to support our National, State and County organizations and make 1949 the outstanding year of Free Medicine in our history.

Respectfully submitted,
D. B. Ensor, M.D.
Councilor, District No. 1

Annual Report of Councilor, District No. 2

To the House of Delegates,
Oklahoma State Medical Association:

As Councilor of the Second District, in accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my annual report:

Councilor District No. 2 includes Roger Mills, Beckham, Custer, Washita, Kiowa, Greer, Harmon, Jackson and Tillman Counties. All of these counties have had County Societies in the past except Roger Mills. During 1948 Harmon County fell below the required minimum of five members to maintain a society and it is recommended that this county combine with one of its neighboring county societies to form a district society.

Early in 1949 the consolidation, which had been authorized by the House of Delegates 1948 annual meeting, of Kiowa and Washita Counties Societies into a district society was completed and a constitution and by-laws were approved. Joint meetings of this district society and its auxiliary have been held with evening dinners together and separate business and scientific sessions. I feel that this society is well organized and functioning extremely well under the leadership of Dr. A. H. Bungardt of Cordell. Mrs. James F. McMurphy of Sentinel is the Auxiliary president and has been very active and capable. The society has scheduled its meetings for the year in advance.

The second Councilor District held a combined afternoon and evening meeting at Cordell October 13, 1948. This meeting was intended to acquaint the members of the district with what was going on in the State Association and to get their reaction. This was poorly attended and I would recommend that in the future such meetings be confined to evening only and that a part of the program be scientific to increase attendance.

All Council meetings have been attended by either your Councilor or Vice-Councilor, Dr. O. C. Standifer of Elk City. I wish to express my appreciation to Dr. Standifer for his help and interest.

The course in gynecology was held at Hobart and Clinton by Dr. Branch. Both were well attended and enjoyed.

There has been a good increase in membership of Blue Cross and Oklahoma Physicians Service this past year.

I want to thank the members of the Second Councilor District for the honor and privilege of representing them this past year. I will appreciate suggestions from them and will attempt to carry out their wishes insofar as time will permit.

Respectfully submitted,
L. G. Livingston, M.D.
Councilor, District No. 2

Annual Report of Councilor, District No. 3

To the House of Delegates,
Oklahoma State Medical Association:

In accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my report as Councilor representing the Third Councilor District of the Oklahoma State Medical Association, comprising the following counties: Garfield, Grant, Kay-Noble, Pawnee Payne, for the fiscal year, 1948-1949.

Activity within the Third Councilor District has not been sensational in nature during the past year, but has represented important normal functioning. I have attended all Council meetings which were well attended. Many important matters have been taken up at these meetings that primarily concern all members of the Association rather than particular Councilor Districts.

In the latter part of May, 1948, I presented a Fifty Year Button to Dr. Stalker, of Pond Creek, Oklahoma, which seemed to please him very much. During June, 1948, A. S. Risser, M.D., Blackwell, Oklahoma, was presented a certificate commending him for his services as Past President of the State Medical Association, the presentation was made by Glenn Kreger, M.D., President of Kay-Noble County Medical Society, at one of their regular meetings. These certificates were presented all Past Presidents at the Annual Meeting in Oklahoma City, but Dr. Risser was unable to at-

tend the occasion at that time. Doctor Francisco and Doctor Bitting, both of Enid were presented their Fifty Year continuous practice lapel pins at a regular meeting of the Garfield County Medical Society during July, 1948.

October 4, 1948, a Councilor District meeting was held at the Youngblood Hotel, Enid, Oklahoma; meeting was scheduled from 1:15 to 5:00 P.M. The weather was unfavorable and undoubtedly cut down attendance, seating Enid, Blackwell, Stillwater, Ponca City and but the meeting was attended by 14 physicians representing Kingfisher. Also present were A. C. Peterman and Gates McCauley, Blue Cross representatives, and John Hart and Dick Graham from the Executive Offices.

October 21, 1948, I was privileged to attend the medical meeting of the Payne County Medical Society at Stillwater and present to Dr. Charles E. Sexton his Fifty Year Pin. Dr. Northcutt, who does an excellent job of making these presentations was out of the state at the time and I, as Councilor, for the Third Councilor District, was asked to make the presentation. I was very proud and honored to make this presentation to Dr. Sexton.

On October 12, 1948, the Public Policy Committee of the Association met with the Republican and Democratic Congressional candidates respectively, at noon and in the evening at the Youngblood Hotel, in order to discuss Compulsory Health Insurance with them and get their respective views. This meeting was open to the pharmaceutical, dental and nursing professions.

During November and December, 1948, plans were made and executed for the amalgamation of the Garfield and Kingfisher County Medical Societies.

Unfortunately, I have been prevented from visiting each County Society in the past year but am very glad to have had the opportunity to contact as many individuals representing the various societies, at different meetings.

It has been a pleasure and a distinct honor to serve this District as your Councilor.

Respectfully submitted,
Bruce R. Hinson, M.D.
Councilor, District No. 3

Annual Report of Councilor, District No. 4

To the House of Delegates,
Oklahoma State Medical Association:

Councilor District No. 4 is made up of Blaine, Canadian, Cleveland, Kingfisher, Logan and Oklahoma Counties. The activities of the Councilor of this district have consisted, for the most part, in attending meetings of the executive committee of the Council, meetings of the Council and the House of Delegates. It has been possible to do very little in the way of visiting the various county societies that make up the district. On one occasion we had the pleasure of taking part in a very delightful meeting of the Canadian County Medical Society when Dr. D. P. Richardson of Union City was honored for his fifty years of membership in the State Association. The dinner meeting at which this honor was conferred was well attended by the doctors and their wives. Our impression was that such events go a long way towards boosting the morale of the profession and bringing about better understanding and more wholesome relations between our members. It was a genuine satisfaction to participate in a meeting to honor a man who had so well deserved the honor.

We arranged for a district councilor meeting and had a good program made out but received such poor response that we felt the attendance would be too poor to justify going ahead with the meeting. Having to

cancel this meeting was discouraging but we do not feel that it was quite as significant as it might seem. It was at a time when all the doctors were very busy and subsequent observations have convinced us that there is really no lack of interest on their part.

It was gratifying to see the excellent attendance of the meeting of the Council held in Oklahoma City on Feb. 19 to consider the plans of the American Medical Association to combat compulsory health insurance. Much interest was shown in this meeting and also in the meeting of the House of Delegates on the following day.

The doctors of this district seem to be very much interested in the program of education to be carried out by the American Medical Association against compulsory health insurance or other forms of socialized medicine. At first there appeared to be some opposition to the special assessment voted by the House of Delegates of the A.M.A. but since the purposes of this program are coming to be better understood, this opposition seems to have almost disappeared. One gets the feeling from hearing doctors express themselves that they are going to be pretty solidly behind it, once they are assured that the funds are going to be used to good advantage.

If only this threat of socialized medicine is averted, (and it is possible for this to be done) it will, in the final analysis, serve a useful purpose. For one thing it has awakened the American Medical Association from a condition of lethargy that was materially interfering with its usefulness to the profession and to the public. It is now showing an interest in the problem of making available good medical service to the public and not leaving this to pure chance. It has also made the entire medical profession more keenly aware of its obligations to the public. Doctors have never been unaware of their individual responsibility to their patients but we may not have realized quite as well as we are coming to do now, our collective responsibility to the entire community. And finally, a threat like this, if it can be averted, will unite the medical profession as it has never been united before. But the if in the above sentence is a big one. It can only be averted by every member of the profession doing everything he can to stop it. Certainly the paying of a twenty-five dollar assessment is little enough in this direction.

Respectfully submitted,
Carroll Pounders, M.D.
Councilor, District No. 4

Annual Report of Councilor, District No. 5

To the House of Delegates,
Oklahoma State Medical Association:

The Fifth Councilor District meeting was held in Duncan in October, 1948. It was well attended. The Stephens County Medical Society acted as host. An afternoon meeting was held and C. E. Northcutt, M.D., of Ponca City and Mr. John Hart of the Executive Office were present. The discussion of the reformation of the new Councilor Districts was discussed and it was the general thought of the assembly that this Councilor District would be better served by a Councilor if it were smaller. The night meeting was well attended. The ladies came in invited guests.

The Carter County Medical Society bestowed 50 Year Pins on Dr. Walter Hardy and Dr. H. A. Higgins of Ardmore, Oklahoma, and the other counties of the Councilor District were urged to bestow 50 Year Pins if any physicians were eligible in their counties.

Respectfully submitted,
J. Hobson Veazey, M.D.
Councilor, District No. 5

Annual Report of Councilor, District No. 6

To the House of Delegates,

Oklahoma State Medical Association:

During the past 12 months there has been much progressive activity conducted by the medical profession of District No. Six, which comprises Creek, Nowata, Osage, Rogers, Tulsa and Washington Counties. This has included not only the organizational work of the various County Medical Societies, but additionally the doctors as individuals have contributed of their time and effort to community and civic projects.

Cooperation of the county societies of the District with the Oklahoma State Medical Association has been excellent, and representatives of these societies have expressed to me their continued support of the Public Relations Program and other beneficial projects of the Association. I am advised, too, that scientific study of medicine by the various societies has undergone a revival of interest with the local members encouraging such a program through preparation and presentation of papers. This has far more benefit than a restricted policy of constantly importing outside speakers.

The Blue Cross Plan and Oklahoma Physicians Service, the headquarters of which are in Tulsa, have kept me informed of the forward strides which are being made by these two groups. The plans have not been without their difficulties and problems, but these have been solved through the joint cooperation of the doctors and lay persons who comprise their board of directors.

The Washington-Nowata County Medical Society is to be congratulated on its well formulated scientific programs and their interests in industrial medicine and hospital problems, and for the new community hospital at Nowata which was constructed with the advice and assistance of the profession. Creek County Medical Society and Rogers County Medical Society have both been considering applying for consolidation with Tulsa County, and this is now being discussed by various groups concerned. The Osage County Medical Society is brimming with enthusiasm from not only the established medical leaders but a group of livewire young men. Their response to our legislative conferences of last fall was truly praiseworthy. The Tulsa County Medical Society, of course, does things on a grand scale which they are enabled to do by reason of their large membership, executive offices and library. Their work program is wide and very beneficial, and at the risk of being inmodest I believe it to be one of the best local societies in the nation.

I regret that illness during part of the year prevented my visiting some of the societies. I did try to keep in touch with the leaders of each society in the District and kept them advised of the happening of the State Office.

Respectfully submitted,
Ralph A. McGill, M.D.
Councilor, District No. 6

Annual Report of Councilor, District No. 7

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor for the Seventh District and in accordance with the By-Laws of the Oklahoma State Medical Association, the annual report is herewith submitted.

The members of the Seventh Councilor District have been particularly interested during the past year in the legislative program, but state and national, and many additional activities related. Their response to the special assessment of the American Medical Association was observed with considerable satisfaction

as evidence of the fact that the members of the Association in general are perhaps becoming more socially conscious of the need to improve public relations, as individuals and as an organization.

An extensive program of organization of the Women's Auxiliary has been a highlight during the past year. There is a growing sentiment to the effect that the Women's Auxiliary is an increasing important activity which will be followed through the coming years with much interest.

The first annual meeting of the Oklahoma Academy of General Practice was held in Shawnee on March 18 and 19, and was attended by approximately 80 members from various parts of the state. An unusually good program included speakers who were well chosen for the purpose, such as Edward L. Compere of Chicago, Grady Reddick of Dallas and George Garrison of Oklahoma City.

Respectfully submitted,
Clinton Gallaher, M.D.
Councilor, District 7

Annual Report of Councilor, District No. 8

To the House of Delegates,

Oklahoma State Medical Association:

The Eighth Councilor District is composed of Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah and Wagoner Counties. It can be noted that Adair, and Delaware Counties are inactive due to the scarcity of active members of the State Medical Association. Ottawa, Okmulgee, Craig and the amalgamated Muskogee, Sequoyah, Wagoner County Societies are active and hold regular meetings.

There have been two Councilor District Society meetings during the past year, as follows:

October 1, 1948, in Muskogee, Oklahoma, with an attendance of some 80 members and guests. Clarence E. Northcutt, M.D., President of the Oklahoma State Medical Association and Mr. John Hart, Associate Secretary of the Oklahoma State Medical Association were present. Each allied profession in this area was represented. Fifty Year Pins were awarded to Floyd E. Waterfield, M.D., of Muskogee, Oklahoma, and John S. Allison, M.D., of Tahlequah, Oklahoma. F. Redding Hood, M.D., of Oklahoma City, Oklahoma, presented a very interesting discussion of heart disease. This meeting was called to order at 1:00 P.M. A dinner was served at 6:30 P.M. at the Severs Hotel and following the dinner the program was extended until 9:30 P.M.

On December 15, 1948, in Viuita, Oklahoma, where a dinner was enjoyed at the Eastern Oklahoma State Hospital as guests of Felix Adams, M.D. An interesting program was given by Doctors Adams and Hayes. Thirty-five members were present.

Another District Meeting is planned at Okmulgee, Oklahoma, in April, 1949.

The Muskogee, Sequoyah, Wagoner County Medical Society meets on the second and fourth Mondays of each month at 7:30 P.M. at the Oklahoma Baptist Hospital, Muskogee, Oklahoma. This Society has adopted a Constitution and By-Laws in conformity with the plan of the Oklahoma State Medical Association. This Society has an active Auxiliary.

The Ottawa County Medical Society meets on the second Thursday of the month and, at intervals, cooperates with the Craig County Medical Society, holding meetings in Viuita, Oklahoma. This Society is active and has adopted a Constitution and By-Laws in conformity with the plan of the Oklahoma State Med-

ical Association. This society has an active Auxiliary.

The Okmulgee County Medical Society meets on the second Monday of the month, alternating in three locations, in March, April, October and November it meets in Okmulgee, Oklahoma, in December, January and February it meets in Henryetta, Oklahoma and in May and September it meets in Okemah, Oklahoma. This society is active and has adopted a Constitution and By-Laws in conformity with the Oklahoma State Medical Association plan.

The Mayes County Medical Society is inactive, but the membership of this Society cooperates with Craig County Medical Society.

The Craig County Medical Society has no regularly scheduled meetings, but cooperates with the Ottawa and Mayes County Medical Societies.

Cherokee County Medical Society meets on the first Tuesday of the month and has an active Society.

Much constructive work has been done by W. Jackson Sayles, M.D., of Miami, Oklahoma, who is the Vice-Councilor of this District. It is my opinion that the County Medical Societies named above in this District are in a healthy condition and active.

Respectfully submitted,

S. D. Neely, M.D.,

Councilor, District No. 8

Annual Report of Councilor, District No. 9

To the House of Delegates,

Oklahoma State Medical Association:

The Oklahoma State Medical Association within the past few years has become a big business and through the efficiency and sincerity of the recent presidents and the Executive Office, this business has been carried on in an extraordinarily progressive and businesslike manner. The Ninth District has been interested primarily within the past year with the Public Relations Program as sponsored by the State Association. The meeting of the Ninth Councilor District in McAlester on September 19 had to do principally with the Public Relations Program and at the banquet the guest speaker was the Honorable Melvin Cornish, Attorney-at-Law, McAlester, Oklahoma. Mr. Cornish pleaded for a closer relationship between the medical and the legal profession and stated that the legal profession was almost 100 per cent against any form of national compulsory health insurance.

This Councilor has endeavored to keep in contact with the Medical Societies of this District and to bring to them the ideas advocated by the State Medical Association and to keep them informed as to the recent discussions of our Council as related to the \$25.00 as-

essment of each member of the American Medical Association. This councilor has also endeavored to keep posted as to the problems facing the Arkansas Medical Association and to discuss their problems as they might concern our own county societies and the Oklahoma State Medical Association as a whole.

Recently there has been a desire expressed by members of both the LeFlore and Haskell Medical Societies for an amalgamation of these two societies to be perfected. This will be decided at the next meeting of the House of Delegates. Mrs. Joseph Kelso, Oklahoma City, has recently made a visit to this District and has organized the LeFlore-Haskell County Medical Auxiliary.

Respectfully submitted,

Earl M. Woodson, M.D.

Councilor, District No. 9

Annual Report of Councilor, District No. 10

To the House of Delegates,

Oklahoma State Medical Association:

In accordance with the Constitution of the Oklahoma State Medical Association, I respectfully submit, herewith, the annual report of the activities of the Tenth Councilor District.

I am happy to report to this House of Delegates that the difference which appeared unsurmountable in one of our amalgamated societies has now been overcome and all amalgamations are now working smoothly and efficiently.

Particularly do I wish to call to the attention of these delegates assembled the action of the Tri-County Society of Choctaw, Pushmataha and McCurtain in extending an invitation to that meeting and the acceptance thereof, of allied professional groups in this Tri-County area.

It is my understanding that many differences have now been converted to many understandings.

The Councilor of this District most respectfully urges the other societies in his district to investigate this idea with the thought of adoption.

In the latter part of September, 1948, the Tenth Councilor District meeting was held in Durant, Oklahoma, which was well attended. The problems of the profession, redistricting of the councilor districts and rechartering of the county societies were thoroughly discussed.

I remain, deeply grateful for the honor and privilege for having had the pleasure of serving the district another year.

Respectfully submitted,

W. K. Haynie, M.D.

Councilor, District No. 10

LIFE MEMBERS

The following applications have been received for Life Membership:

O. S. Somerville, M.D., Bartlesville
S. P. Roberts, M.D., Bartlesville
I. V. Hardy, M.D., Medford
O. W. Rice, M.D., McAlester
A. L. Dougan, M.D., Carmen
R. B. Hayes, M.D., Guymon
Jesse L. Blakemore, M.D., Muskogee
W. R. Joblin, M.D., Porter
W. D. Baird, M.D., Oklahoma City
J. T. Martin, M.D., Oklahoma City
J. E. Harbison, M.D., Oklahoma City
W. W. Rucks, Sr., M.D., Oklahoma City
F. M. Sanger, M.D., Oklahoma City
R. A. Brown, M.D., Prague
Raymond W. Stoner, M.D., Checotah

Dan Gray, M.D., Guthrie
H. A. Higgins, M.D., Ardmore
Walter Hardy, M.D., Ardmore

HONORARY MEMBERS

The following applications have been received for Honorary Membership:

Joseph G. Breco, M.D., Ada
Sam A. McKeel, M.D., Ada
H. E. Huston, M.D., Cherokee
Thomas J. Lyuch, M.D., Tulsa
W. Albert Cook, M.D., Tulsa
Sidney C. Venable, M.D., Tulsa
O. E. Templin, M.D., Alva
R. C. McCreery, M.D., Erick
D. B. Collins, M.D., Lawton
William A. Tolleson, M.D., Eufaula

COMMITTEE REPORTS

Report of the Medical Advisory Committee to the Department of Public Welfare

The Medical Advisory Committee was established in 1941 at the request of the Department of Public Welfare for the purpose of advising the Department on the medical aspects of the Aid to Dependent Children program. This program is one of the three assistance programs administered by the State Department of Public Welfare; through it, aid may be given to children who are in need because of the death, absence from home, or incapacity of their parents. Approximately one-third of the children aided through the Aid to Dependent Children program are in need because of their parents' incapacity. The Medical Advisory Committee advises and counsels with the Welfare Department in regard to general policies, standards, and procedures related to the health problems of these parents; the Committee also reviews their individual medical and social reports. Individual members of the Committee review the reports weekly, and the Committee meets as a whole at least once every three months.

During the past year, the Committee considered that it would be advisable to secure some information about the health status and the health needs of the individuals who are receiving assistance under the Aid to Dependent Children program. In August of 1948, approximately 7,350 families, involving about 36,500 individuals, were receiving this type of aid because of the ill health of one or both parents. A survey was made on request of the Committee, and on the basis of the survey material, it was estimated that over 8,000 individuals were in need of medical attention, and that more than half of these were receiving no treatment. The survey further revealed that many of these disabled persons had illnesses, particularly hemorrhoids, hernias and varicosities, which were of a remedial nature, and furthermore that many of the patients who had these disabilities were in young or early middle-aged groups. The conclusion was drawn that many individuals who are receiving assistance for their dependent children could be returned to self-supporting status if more treatment facilities were available in Oklahoma. If and when funds available shall permit the Department to provide most of this needed medical care, the Committee stands ready to advise regarding the general policies, standards and procedures by which such treatment shall be given.

The Committee advises and counsels with the Department to insure that fullest possible use is made of such treatment facilities as do exist in Oklahoma. This has involved cooperative relationships with agencies which give treatment, particularly the Vocational Rehabilitation office and University Hospitals. Representatives and executives of both of these agencies met with the Committee during the year. It has appeared to the Committee that there is good cooperation between the Welfare Department and the various agencies providing medical treatment and that the "lag" in getting treatment for individuals with remediable disabilities is due to the fact that the various health programs are not large enough to meet the needs of the numbers that come to the attention of the Welfare Department.

Another service given by the Committee to the Welfare Department has been advice regarding fees to be paid for health examinations and related laboratory work necessary for establishing diagnoses.

Committee members reviewed a total of 2,621 cases in the fiscal year 1948-1949. The Department's State Ophthalmologist, who serves as ex officio member of the

Committee, has reviewed approximately 1,305 cases during the fiscal year. For each of these, a member of the Advisory Committee gave his opinion as to whether the examination report from the local medical doctor was adequate to establish the existence of a disability, or whether more detailed diagnostic information was necessary, or whether a disability does exist and if so whether it is of a nature that significantly limits the patient's activities.

The work of this Committee is interesting, but time-consuming. The Department of Public Welfare has, however, informed us repeatedly that the advice which the Committee is able to give is of real value and benefit in administering the Aid to Dependent Children program.

Joseph W. Kelso, M.D., Chairman
Mack I. Shanholtz, M.D., Ex Officio
Tullos O. Coston, M.D., Ex Officio
F. P. Baker, M.D.
John C. Dague, M.D.
Wilburt F. Lewis, M.D.
M. P. Prosser, M.D.
George Ross, M.D.
Fred Switzer, M.D.

Report of the Medical Advisory Committee to the Vocational Rehabilitation Division

The Medical Advisory Committee to the Vocational Rehabilitation Division has held no meetings this year. Previous definition of policy and modes of procedure have seemed adequate for the purposes for which the committee was appointed. However, a number of conferences with Mr. Scurlock have been held by the chairman and various members of the committee. It is the impression of the chairman that the progress of the activities of the Vocational Rehabilitation Division Committee under the very able direction of Mr. Scurlock, should be considered worthy of the continuous approval and support by all members of the Oklahoma State Medical Association.

Respectfully submitted,
Clinton Gallaher, M.D., Chairman
J. O. Asher, M.D.
Bert F. Keltz, M.D.
John Perry, M.D.
Fred O. Pitney, D.D.S.
Harry Smith

Report of the Committee for the Study and Control of Tuberculosis

During the year 1948 there were 44,571 x-rays taken by the Mobile Unit of the Oklahoma County Health Association. There were 65 cases diagnosed as pulmonary tuberculosis and 76 suspects. This unit is maintained by funds obtained through the sale of Christmas seals.

It is felt that this is a worthwhile project and that it should be continued. In addition to the cases of tuberculosis diagnosed there were 149 films showing enlargement of the heart, five possible mediastinal tumors, one metastatic sarcoma, one foreign growth, four bronchiectasis. All patients in whom an abnormality is discovered receive a card notifying them to see their family physician for further advice. Indigent patients receive further study and advice through the Tuberculosis Clinic.

A large scale program has been carried out by the State Department of Health with their several mobile units. Those interested in the details of this project

can obtain data by writing the Oklahoma State Department of Health, Oklahoma City. The tuberculosis program is under the direction of Richard M. Burke, M.D.

Further experience with streptomycin has demonstrated conclusively that it is definitely beneficial in selected cases of tuberculosis, e.g., acute pneumonic and disseminated types, tuberculous laryngitis, tracheo-bronchial tuberculosis, and tuberculous meningitis. It often has a recessive action in chronic ulcerative tuberculosis but the end results are not encouraging. Here it is useful as an adjunct in connection with collapse therapy. In patients who have a spread (exudative lesion) occurring in the contralateral lung during the course of collapse therapy streptomycin is often a specific. Tuberculous fistulae often heal or respond satisfactorily.

Dihydrostreptomycin prepared by catalytic hydrogenation of streptomycin, which has been available for several months, seems to be as effective as streptomycin and reactions such as dizziness and disturbances of the auditory apparatus are less apt to occur. The dose is $\frac{1}{2}$ Gm. intramuscularly every 12 hours.

The present status of BCG vaccination in prevention of tuberculosis is promising, especially in regions where the incidence of tuberculosis is high, such as exists among many of the Indian tribes and the slum districts of many of the large cities. The evidence is still somewhat meager concerning the degree and duration of immunity conferred by BCG, it being remembered that tuberculin sensitivity is not a measure of relative immunity. In areas of low prevalence of tuberculosis the vaccination is considered by some to be a disadvantage in view of the importance of the tuberculin test in tracing foci of open infectious disease. It is generally agreed that the vaccine has been harmless and that it may be of some help in controlling the disease where the prevalence is high and proved public health measures are lacking or inadequate.

The Committee recommends:

1. More appropriation for the two state sanatoria.
2. Increase of salary for occupational therapists, health educators and medical personnel, as this is one way of making these positions attractive to competent individuals who are interested in these important positions.

The Committee also feels that more buildings are needed for employees at both of the state institutions.

Floyd Moorman, M.D., Chairman
R. M. Shepard, M.D.
F. P. Baker, M.D.
Richard M. Burke, M.D.

Report of the Crippled Children's Committee

The Crippled Children's movement of the State of Oklahoma is closely allied with the policies of the medical profession of the State. Changes are always being considered and at the present time there is a demand for improving the Oklahoma Crippled Children's Act.

The Federal Government has insisted that there be one agency which will be responsible, due to the fact that the Federal Social Security Act has found many conflicts in serving the State of Oklahoma. The objections to the present act or program are as follows:

1. Requires a court commitment for treatment in a hospital. Federal Children's Bureau objects strenuously to this requirement. Argues that it violates Federal requirement of a single responsible state agency.

2. State makes no direct appropriation. Federal government has sent approximately one and one-half million dollars to Oklahoma during the past 14 years. Most of this money had to be matched and this was done by listing services to individual children by the Oklahoma

Hospital for Crippled Children. Children's Bureau justifiably feels that now a direct appropriation should be made to the official crippled children's agency.

3. Federal Social Security Act provides that a state requesting and receiving funds must designate a "Single State Agency" to handle crippled children's program. In Oklahoma, the Oklahoma Hospital for Crippled Children, the county courts, the Commission for Crippled Children, the Committee on Standardization, and the Oklahoma Spastic Paralysis Commission all have certain legal responsibilities in connection with the administration of the Oklahoma Crippled Children's program.

4. Present Crippled Children's Act contains a phrase taken from the Oklahoma hospital act of 1917 to the effect that physicians cannot be paid from crippled children's funds.

OBJECTIVES OF PROPOSED REVISION

1. Definitely makes the Commission for Crippled Children the responsible "single agency" for developing and administering a program of medical care for children.

2. Retains county participation. (a) by mandatory fifth mill appropriation, (b) by authorizing Commission to accept patient upon "application" by the County Court.

3. Authorizes payment for physicians services.

4. Committee on Standardization now termed "Professional Advisory Committee," and not a separate agency.

5. Legalizes and continues present working arrangement between the Oklahoma Commission for Crippled Children and the State Department of Public Welfare.

6. Finance the care of patients at the Oklahoma Hospital for Crippled Children through appropriation to Commission for Crippled Children rather than to the Higher Board of Regents.

The changes to the act have been presented to the Legislature in due form and it is thought there will be no question about their passing.

It is also proposed in these changes that the financing of the crippled children's work will be provided through a one-fifth mill levy, whereas previously the tax has been only one-tenth mill. This increase will greatly aid the communities of lesser population and wealth.

Respectfully submitted,
Earl D. McBride, M.D., Chairman
L. S. Willour, M.D.
Ben H. Nicholas, M.D.
D. H. O'Doughue, M.D.
C. A. Traverse, M.D.
W. B. Mullins, M.D.
Ian MacKenzie, M.D.

Report of the Committee on Postgraduate Medical Teachings

The Postgraduate Committee of the Oklahoma State Medical Association makes the following annual report to the House of Delegates.

The course in Gynecology, under the competent instructorship of J. R. Bromwell Branch, M.D., was completed in early January.

For several months the Committee attempted to find an instructor to teach the two-year course in Internal Medicine. In spite of contacting one hundred different institutions, colleges, agencies, etc., the Committee did not obtain an instructor until the first of March.

On March 6, 1949, the Postgraduate Committee met in Oklahoma City. The attendance was excellent. Robert M. Becker, M.D., the tentative instructor in Internal Medicine, came before the Committee. A thorough dis-

cussion was carried on by the Committee and Doctor Becker. All phases of our postgraduate teaching problems were considered. The result of this meeting and personal conference was that the Committee voted unanimously to engage Robert M. Becker, M.D., to teach Internal Medicine for two years throughout the state. Arrangements are going forward and the actual teaching of this course will begin in July, 1949.

The Postgraduate Committee is pleased to inform the House of Delegates that The Commonwealth Fund, which has been so liberal in the past, has again agreed to aid us financially in carrying out the course in Internal Medicine. As the postgraduate teaching has progressively become more self supporting, less money has been asked from the Commonwealth Fund. At the conclusion of the course in Internal Medicine the Commonwealth Fund will discontinue its financial support, as per their initial plan, namely, to sponsor but not permanently subsidize this form of postgraduate teaching.

The Oklahoma State Health Department, under the competent guidance of Dr. Grady F. Mathews, has likewise agreed to aid us substantially in carrying out the instruction in Internal Medicine. The continued financial support of the State Health Department in carrying out this worthwhile postgraduate teaching should be appreciated by every member of the State Medical Association and indirectly by every patient of every member who, in reality, are beneficiaries of the support given this work by Doctor Mathews and his staff. The Oklahoma State Medical Association, in turn, will continue the usual financial support needed for the carrying on of this teaching program.

As Chairman of the Postgraduate Committee, I wish to thank each member of the Committee for the unusual active interest they have taken during the past year. It is obviously necessary that this Committee be made up of members from all parts of the state. It is therefore exhilarating to the Chairman to have the members of this Committee drive to Oklahoma City or Tulsa, on call, and take an active, enthusiastic interest in the promotion of this valuable form of teaching.

The Chairman wishes to thank Mrs. Orene Ramsey for her continuous, efficient and enthusiastic carrying on of, by far, the majority of the work of this Committee. During the past year, due to the lack of a field representative, Mrs. Ramsey has gone out into the state personally and registered doctors for these courses. This field work is not a part of Mrs. Ramsey's duties but was carried on by her because of her personal interest in the success of the postgraduate teaching.

As Chairman of the Postgraduate Committee for the past six years, I wish to thank the various members of the Committee during these years for their help and cooperation. As Chairman, the work, though not great, has been pleasant and I have a feeling that this form of teaching makes up one of the most valuable activities of the State Medical Association. It is my opinion that the public relationship between doctors and the elevation of the plane of medical practice created by this postgraduate teaching is far more worth while to the doctor and the community than many other forms of so-called public relationship now becoming popular.

The Postgraduate Committee, now having engaged an instructor to teach Internal Medicine, of whom we are already proud, enters the next two years of teaching well organized with the exception of the field work which should be improved. It is my opinion the new Chairman of the Postgraduate Committee, in cooperation with the State Association office, should work out some plan whereby the work of the field representative,

so efficiently carried on by Mr. Kibler in previous years, can be taken over and efficiently managed by the personnel of the state office.

Respectfully submitted,
 Gregory E. Stanbro, M.D., Chairman
 Floyd T. Bartheld, M.D.
 J. William Finch, M.D.
 R. C. Gentry, M.D.
 O. R. Gregg, M.D.
 W. A. Hyde, M.D.
 John F. Kuch, Jr., M.D.
 Harold H. Macumber, M.D.
 O. L. Parsons, M.D.
 C. J. Roberts, M.D.
 Homer A. Ruprecht, M.D.
 Fred W. Sellers, M.D.
 Wendell L. Smith, M.D.
 I. F. Stephenson, M.D.

Report of the Committee on Necrology

The Committee on Necrology submits the following report to the House of Delegates:

Since the last Necrology report in May, 1948, The Almighty in his infinite wisdom has called from our midst 31 of our beloved friends and co workers. While we bow in sorrow to the will of the Omniscience, we are appreciative of these wonderful men. Physicians, scientists, teachers and friends, and their far-reaching influence while will continue to inspire us to carry on our duties to Humanity.

THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association, recognize the demise of those former 31 Fellow Members and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association:

| | | |
|-------------------------|-----------------|--------------|
| E. J. Boling | Billings | March, 1948 |
| R. P. Dickey | Caddo | March, 1948 |
| William Polk Longmire | Sapulpa | May, 1948 |
| V. C. Tisdal | Clinton | May, 1948 |
| Clarence R. McDonald | Mannford | June, 1948 |
| M. A. Houser | Tulsa | June, 1948 |
| William C. Vernon | Okmulgee | June, 1948 |
| Marion McDowell Webster | Ada | July, 1948 |
| I. L. Cummings | Ada | July, 1948 |
| A. M. Butts | Holdenville | July, 1948 |
| Euel Hathaway | Lawton | July, 1948 |
| W. B. Davis | Stroud | July, 1948 |
| Bernard L. Branley | Tulsa | August, 1948 |
| Ben Bell | Oklahoma City | Sept., 1948 |
| George R. Osborn | Tulsa | Oct., 1948 |
| Ralph V. Smith | Britton | Nov., 1948 |
| S. C. Davis | Blanchard | Nov., 1948 |
| J. J. Hipes | Coalgate | Nov., 1948 |
| Harris P. Price | Tulsa | Nov., 1948 |
| Frank H. Norwood | Prague | Dec., 1948 |
| Walter Henry Livermore | Chickasha | Dec., 1948 |
| J. I. Derr | Waurika | Dec., 1948 |
| L. T. Lancaster | Cherokee | Dec., 1948 |
| L. C. White | Adair | Dec., 1948 |
| Jonah Nichols | Gulfport, Miss. | Dec., 1948 |
| Thomas Boyd Turner | Stigler | Dec., 1948 |
| Benjamin Davis | Cushing | Jan., 1949 |
| M. M. Turlington | Seminole | Jan., 1949 |
| M. W. Weir | Oklahoma City | Feb., 1949 |
| S. M. Parks | Bartlesville | Feb., 1949 |
| E. P. Allen | Oklahoma City | March, 1949 |

Respectfully submitted,
 P. P. Nesbitt, M.D., Tulsa
 George H. Niemann, M.D., Ponca City

Report of the Veterans Medical Care Committee**I. OKLAHOMA CITY REGIONAL DISTRICT**

| A. | Specialists | General Practitioners | Total No. of eligible Physicians |
|--------------|-------------|-----------------------|----------------------------------|
| | | | Physicians |
| District I | 12 | 23 | 57 |
| District II | 18 | 38 | 86 |
| District III | 32 | 47 | 130 |
| District IV | 141 | 69 | 472 |
| District V | 22 | 38 | 116 |
| District VII | 24 | 49 | 130 |
| B. Totals | 249 | 264 | 992 |

C. Number of eligible physicians (total members of Oklahoma State Medical Association in Oklahoma City Regional District) compared with total participating physicians.

Eligible 992

Now Participating 513

D. Number of veterans treated during fiscal year (July, 1948, through January, 1949). 4,321

E. Total fees paid to physicians for Examinations \$55,649.49
Total fees paid to physicians for Treatment 30,419.30

F. Private Hospitals utilized by the Veterans Administration 39

G. There have been eight meetings of the Consultants Committee.

II. MUSKOGEE REGIONAL DISTRICT

| A. | Specialists | General Practitioners | Total No. of eligible Physicians |
|---------------|-------------|-----------------------|----------------------------------|
| | | | Physicians |
| District VI | 95 | 82 | 305 |
| District VIII | 30 | 39 | 125 |
| District IX | 11 | 21 | 49 |
| District X | 14 | 13 | 46 |

B. TOTALS 150 155 525

C. Number of eligible physicians (total members of

Oklahoma State Medical Association City Regional District) compared with total participating physicians.

Eligible 525

Now Participating 305

D. Number of veterans treated during current fiscal year (July, 1948, through February 18, 1949) 1,850

E. Total fees paid to physicians for both Examination and Treatment \$58,172.21

F. Private Hospitals utilized by the Veterans Administration 18

G. The Consultant Advisory group from the Muskogee Regional District met on the average of once a month at which times the administrative and medical problems confronting the Regional Office were reviewed.

III. No physicians have withdrawn from the program in either the Muskogee Regional District or the Oklahoma City Regional District.

IV. There have been four meetings of the Advisory Committee.

V. All in all the physicians participating in the Veterans Home Town Medical Care Program have been extremely cooperative. The distribution of assignments from both regional offices has been fair. There have been no complaints, with a few exceptions, from members of the Oklahoma State Medical Association and likewise there have been few or no complaints from the Veterans.

VI. It is the recommendation of the Committee that the Oklahoma State Medical Association continue to cooperate with the Veterans Administration.

Respectfully submitted,
LeRoy Sadler, M.D., Chairman
John F. Burton, M.D.
Ben Ward, M.D.
E. G. King, M.D.
James F. Curry, M.D.

PROPOSED AMMENDMENTS TO THE CONSTITUTION

The amendments to the Constitution of the Oklahoma State Medical Association to be considered at the 1949 Annual Meeting submitted by the committee to revise the Constitution and By-Laws at the 1948 Annual Meeting.

(The placement of these amendments are predicated on publication in 1947-48 Directory) Constitution

Article I: Add at the end of the sentence the word "Incorporated."

Article II: Purpose of the Association. "This Association is formed to promote the science and art of medicine." and striking the present section.

Article VIII — Section 1: Line 5, after the word

"Councilors" and before the word "as" insert the words "and Vice-Councilors."

Article VIII — Section 2: Insert at the end of the section "The President-Elect shall become President for a term of one year upon the expiration of his term as President-Elect."

Article VIII — Section 2: Line 5, between the words "Councilors" and "for" insert the words: "and Vice-Councilors."

Article VIII — Section 4: Line 3, add, between the words "appointment" and "being" the following words: "by the President", and to add at the end of the last sentence "and Councilors, whose terms shall be completed by their respective Vice-Councilors."

ANNUAL AUDIT REPORT

C. E. Northcutt, M.D., President
Oklahoma State Medical Association
210 Plaza Court
Oklahoma City, Oklahoma

January 25, 1949

Dear Sir:

We have completed Audit of the Financial Records of:

THE OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

for the period January 1, 1948 to December 31, 1948 and submit herewith the following Exhibits.

- EXHIBIT "A"—Balance Sheet
- EXHIBIT "B"—Statement of Receipts & Disbursements
- EXHIBIT "C"—Operating Statement
- EXHIBIT "D"—Bank Reconciliations

We wish to thank you for this Audit, and if we can be of further service, please feel free to call upon us.

Respectfully submitted,
H. E. COLE COMPANY
By H. J. Cole

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OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

EXHIBIT "A"

BALANCE SHEET

December 31, 1948

ASSETS

| <i>CURRENT ASSETS</i> | <i>Total</i> | <i>Membership</i> | <i>Publicity</i> | <i>Journal</i> |
|----------------------------|--------------|-------------------|------------------|----------------|
| Bank | \$33,074.57 | \$12,941.28 | \$18,340.41 | \$ 1,792.88 |
| Petty Cash | .41 | .41 | | |
| Accounts Receivable | 250.00 | | | 250.00 |
| Total Current Assets | \$33,324.98 | \$12,941.69 | \$18,340.41 | \$ 2,042.88 |
| <i>INVESTMENTS</i> | | | | |
| U. S. Bonds | \$12,398.88 | \$12,398.88 | | |
| TOTAL ASSETS | \$45,723.86 | \$25,340.57 | \$18,340.41 | \$ 2,042.88 |

LIABILITIES

| <i>CURRENT LIABILITIES</i> | | | | |
|-----------------------------------|-------------|-------------|-------------|-------------|
| Accrued Withholding Tax | \$ 620.20 | \$ 372.30 | | \$ 247.90 |
| Accrued Social Security Tax | 32.79 | 11.19 | | 21.60 |
| Total Current Liabilities | \$ 652.99 | \$ 383.49 | | \$ 269.50 |
| Operating Reserve | 45,070.87 | 24,957.08 | 18,340.41 | 1,773.38 |
| TOTAL LIABILITIES | \$45,723.86 | \$25,340.57 | \$18,340.41 | \$ 2,042.88 |

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

EXHIBIT "B"

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

January 1, 1948 to December 31, 1948

| | <i>Total</i> | <i>Membership</i> | <i>Publicity</i> | <i>Journal</i> |
|---------------------------------------|--------------|-------------------|------------------|----------------|
| Cash Balance — January 1, 1948 | \$ 24,073.41 | \$14,772.96 | \$ 7,281.88 | \$ 2,018.57 |
| Petty Cash — January 1, 1948 | 100.00 | 100.00 | | |
| | \$ 24,173.41 | \$14,872.96 | \$ 7,281.88 | \$ 2,018.57 |
| <i>RECEIPTS</i> | | | | |
| Dues | \$ 60,800.00 | \$31,888.50 | \$28,911.50 | \$..... |
| Annual Meeting | 5,467.85 | 5,467.85 | | |
| Advertising & Subscriptions | 13,762.93 | | | 13,762.93 |
| Directory | 1,952.88 | | | 1,952.88 |
| U. S. Bond Interest | 235.00 | 235.00 | | |
| Repaid by Radio Account | 16.31 | 16.31 | | |
| Refund—Railway | 46.66 | 46.66 | | |
| Refund—Colo. State Medical Assn. | 74.52 | 74.52 | | |
| Refund—Shipping Charges | 10.83 | 10.83 | | |
| Councilor District Dinner—Shawnee .. | 16.00 | 16.00 | | |
| Medical Service Soc. Printing | 35.38 | 35.38 | | |

| | | | | |
|-------------------------------------|--------------|-------------|-------------|-------------|
| Publicity Fund | .78 | .78 | ..... | ..... |
| Medical Defense Fund | 419.34 | 419.34 | ..... | ..... |
| Membership Fund | 4,262.07 | ..... | ..... | 4,262.07 |
| Group Hospital Insurance | 10.25 | ..... | 10.25 | ..... |
| Total Cash Receipts | \$111,284.21 | \$53,084.13 | \$36,203.63 | \$21,996.45 |
| <i>DISBURSEMENTS</i> | | | | |
| Expenses | \$78,011.64 | \$40,109.75 | \$17,863.22 | \$20,038.67 |
| Less Accruals — W.H. & S.S. | 652.99 | 383.49 | ..... | 269.50 |
| Plus W.H. & S.S. Paid | 600.58 | 416.18 | ..... | 184.40 |
| Total Cash Disbursements | \$77,959.23 | \$40,142.44 | \$17,863.22 | \$19,953.57 |
| Receipts over Disbursements | \$33,324.98 | \$12,941.69 | \$18,340.41 | \$ 2,042.88 |
| <i>ACCOUNTED FOR AS FOLLOWS:</i> | | | | |
| Accounts Receivable | \$ 250.00 | \$..... | \$..... | \$ 250.00 |
| Bank Balance — December 31, 1948 .. | 33,074.57 | 12,941.28 | 18,340.41 | 1,792.88 |
| Petty Cash | .41 | .41 | ..... | ..... |
| | \$33,324.98 | \$12,941.69 | \$18,340.41 | \$ 2,042.88 |

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

EXHIBIT "C"

OPERATING STATEMENT

January 1, 1948 to December 31, 1948

| <i>REVENUE</i> | <i>Total</i> | <i>Membership</i> | <i>Publicity</i> | <i>Journal</i> |
|---------------------------------------|--------------|-------------------|------------------|----------------|
| Membership Dues | \$60,800.00 | \$31,888.50 | \$28,911.50 | ..... |
| Annual Meeting | 5,467.85 | 5,467.85 | ..... | ..... |
| Advertising & Subscriptions | 13,762.93 | ..... | ..... | \$13,762.93 |
| Directory | 1,952.88 | ..... | ..... | 1,952.88 |
| U. S. Bond Interest | 235.00 | 235.00 | ..... | ..... |
| Repaid by Radio Account | 16.31 | 16.31 | ..... | ..... |
| Refund—Railway | 46.66 | 46.66 | ..... | ..... |
| Refund—Colo. State Medical Assn. | 74.52 | 74.52 | ..... | ..... |
| Refund—Shipping Charges | 10.83 | 10.83 | ..... | ..... |
| Councilor District Dinner—Shawnee .. | 16.00 | 16.00 | ..... | ..... |
| Medical Service Soc. Printing | 35.38 | 35.38 | ..... | ..... |
| Publicity Fund | .78 | .78 | ..... | ..... |
| Medical Defense Fund | 419.34 | 419.34 | ..... | ..... |
| Membership Fund | 4,262.07 | ..... | ..... | 4,262.07 |
| Group Hospital Insurance | 10.25 | ..... | 10.25 | ..... |
| TOTAL REVENUE | \$87,110.80 | \$38,211.17 | \$28,921.75 | \$19,977.88 |
| <i>EXPENSE</i> | | | | |
| A. M. A. | \$ 1,299.92 | \$ 1,299.92 | \$..... | \$..... |
| Advertising | 16,194.36 | ..... | 16,194.36 | ..... |
| Annual Meeting | 7,310.75 | 7,310.75 | ..... | ..... |
| Auditing and Legal | 300.00 | 300.00 | ..... | ..... |
| Directory | 1,491.81 | 9.20 | ..... | 1,482.61 |
| Dues and Subscriptions | 79.10 | 58.40 | ..... | 20.70 |
| Express and Delivery | 49.33 | 47.32 | ..... | 2.01 |
| General Expense | 2,124.58 | 2,124.58 | ..... | ..... |
| Group Hospital Service | 78.80 | 62.30 | ..... | 16.50 |
| Journal Fund | 4,262.07 | 4,262.07 | ..... | ..... |
| Journal Binding | 30.00 | ..... | ..... | 30.00 |
| Journal Printing & Mailing | 9,261.16 | ..... | ..... | 9,261.16 |
| Journal Engraving | 348.58 | ..... | ..... | 348.58 |
| Luncheons — Committee & Council | 315.73 | 26.25 | 289.48 | ..... |
| Membership Fund | .78 | ..... | .78 | ..... |
| Office Supplies and Expense | 2,166.58 | 2,147.18 | ..... | 19.40 |
| Office Equipment Repair | 44.64 | 44.64 | ..... | ..... |
| Picture Certificate Frames | 68.07 | 22.23 | ..... | 45.84 |
| Postage | 1,060.83 | 960.83 | 100.00 | ..... |
| Post Graduate Committee | 2,000.00 | 2,000.00 | ..... | ..... |
| Press Clipping Service | 148.25 | ..... | ..... | 148.25 |
| Radio Committee | 1,178.60 | ..... | 1,178.60 | ..... |
| Refunds — Dues | 137.50 | 137.50 | ..... | ..... |
| Rent — Office | 1,588.00 | 738.00 | ..... | 850.00 |
| Rent — Safety Box | 6.00 | 6.00 | ..... | ..... |

Salaries

| | | | | |
|-----------------------------------|--------------------|---------------------|--------------------|--------------------|
| Executive Secretary | 10,100.05 | 10,100.05 | ..... | ..... |
| Associate Secretary | 4,200.00 | ..... | ..... | 4,200.00 |
| Office Secretary | 6,736.50 | 4,796.50 | ..... | 1,940.00 |
| Editor | 1,200.00 | ..... | ..... | 1,200.00 |
| Extra | 311.15 | 217.40 | ..... | 93.75 |
| Social Security | 195.83 | 116.83 | ..... | 79.00 |
| Stationery and Printing | 510.88 | 210.01 | ..... | 300.87 |
| Telephone and Telegraph | 729.03 | 729.03 | ..... | ..... |
| Travel | 2,382.76 | 2,382.76 | ..... | ..... |
| Visual Education | 100.00 | ..... | 100.00 | ..... |
| TOTAL EXPENSE | \$78,011.64 | \$40,109.75 | \$17,863.22 | \$20,038.67 |
| REVENUE OVER EXPENSE | \$ 9,099.16 | —\$ 1,898.58 | \$11,058.53 | —\$ 60.79 |

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

EXHIBIT "D"

BANK RECONCILIATION

December 31, 1948

JOURNAL FUND

| | | |
|---|----------|-------------|
| Balance per Bank Statement 12-31-48 | | \$ 2,138.78 |
| Outstanding Checks: 3031 | \$ 92.70 | |
| 3034 | 253.20 | 345.00 |

| | |
|----------------------------------|-------------|
| Balance per Books 12-31-48 | \$ 1,792.88 |
|----------------------------------|-------------|

MEMBERSHIP FUND

| | | |
|---|---------|-------------|
| Balance per Bank Statement 12-31-48 | | \$13,418.48 |
| Outstanding Checks: 2938 | \$ 3.42 | |
| 3027 | 35.90 | |
| 3028 | 31.50 | |
| 3029 | 32.95 | |
| 3030 | 7.65 | |
| 3032 | 5.30 | |
| 3035 | 290.23 | 406.95 |

| | |
|--|-------------|
| Bank Credit to Membership—Should have been Publicity | \$13,011.53 |
| | 70.25 |

| | |
|----------------------------------|-------------|
| Balance per Books 12-31-48 | \$12,941.28 |
|----------------------------------|-------------|

PUBLICITY FUND

| | |
|---|-------------|
| Balance per Bank Statement 12-31-48 | \$18,270.16 |
| Publicity Deposit—Bank Credit to Membership | 70.25 |

| | |
|----------------------------------|-------------|
| Balance per Books 12-31-48 | \$18,340.41 |
|----------------------------------|-------------|

STATE FAIR

| | |
|---|----------|
| Balance per Bank Statement 12-31-48 | \$ 61.87 |
| Balance per Books 12-31-48 | 61.87 |

EDUCATION IN HEALTH LEAGUE

| | |
|---|----------|
| Balance per Bank Statement 12-31-48 | \$ 35.44 |
| Balance per Books 12-31-48 | 35.44 |

BLUE SHIELD PLANS EXCEED TEN MILLION IN 1948

With a fourth quarter gain of 1,057,274 members, the largest quarterly growth in the history of the prepayment medical care movement, Blue Shield national headquarters announced recently that 1948 enrollment had totaled 10,370,819 persons. The million-member gain represented a growth of 11.35 per cent for the fourth quarter of 1948.

Contributing to this phenomenal growth was the enrollment of Ford Motor Company employees, totalling approximately 250,000 persons, the majority of which were enrolled in Michigan Medical Service.

Blue Shield growth for 1948 showed a 43.39 per cent gain over 1947, with an addition of 3,138,628 members during the year.

If she is one
of your patients



...Your help now may spell the difference between unprovided-for old age and economic security.

Women in business who are nervous, emotionally unstable and generally distressed by symptoms of the climacteric almost inevitably experience a reduction in efficiency as well as earning power.

"Premarin" offers a solution. Many thousand physicians prescribe this naturally-occurring, oral estrogen because...

1. Prompt symptomatic improvement usually follows therapy.
2. Untoward side-effects are seldom noted.
3. The sense of well-being so frequently reported tends to quickly restore the patient's confidence and normal efficiency.
4. This "Plus" (the sense of well-being enjoyed by the patient) is conducive to a highly satisfactory patient-doctor relationship.
5. Four potencies provide flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg. and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).



While sodium estrane sulfate is the principal estrogen in "Premarin," other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water-soluble conjugates.

"PREMARIN"



ESTROGENIC SUBSTANCES (WATER-SOLUBLE)
also known as CONJUGATED ESTROGENS (equine)

OFFICERS OF COUNTY SOCIETIES, 1948

| COUNTY | PRESIDENT | SECRETARY | MEETING TIME |
|---------------------------------------|---|----------------------------------|---------------------------------|
| Alfalfa..... | G. G. Harris, Helena | C. E. Cook, Jr., Cherokee | Last Tues. each Second Month |
| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | W. W. Cotton, Atoka | |
| Beckham..... | H. K. Speed, Sayre | E. S. Kilpatrick, Elk City | Second Tuesday |
| Blaine..... | W. F. Bohlman, Watonga | Virginia Curtin, Watonga | Third Thursday |
| Caddo..... | C. R. Waterbury, Apache | Edward T. Cook, Jr., Anadarko | Third Thursday |
| Canadian..... | J. N. Goldberger, El Reno | Jack W. Myers, El Reno | Subject to Call |
| Carter..... | Roger Reid, Ardmore | Royce Means, Ardmore | Second Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | R. K. McIntosh, Jr., Tahlequah | First Tuesday |
| Choctaw-McCurtain- Pushmataha..... | L. E. Gee, Broken Bow | H. D. Wolfe, Hugo | |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Fourth Thursday |
| Comanche..... | Walter Wicker, Lawton | Charles Green, Lawton | Second Tuesday |
| Cotton..... | A. B. Holstead, Temple | Mollie Seism, Walters | Third Friday |
| Craig..... | J. M. McMillan, Vinita | D. H. Olson, Vinita | |
| Creek..... | Frank H. Sisler, Jr., Bristow | Carl W. Bowie, Bristow | Second Tuesday |
| Custer..... | Floyd Simon, Clinton | J. H. Tisdal, Clinton | Third Thursday |
| Garfield..... | Byron J. Cordonier, Enid | Roscoe C. Baker, Enid | Fourth Thursday |
| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Greer..... | Van S. Pamley, Mangum | J. B. Hollis, Mangum | |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | First Wednesday |
| Haskell..... | William S. Carson, Keota | N. K. Williams, McCurtain | |
| Hughes..... | Imogene Mayfield, Holdenville | Ruth Annadown, Holdenville | First Friday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Last Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Monday |
| Kay-Noble..... | D. M. Gordon, Ponca City | C. W. Arrendell, Ponca City | Second Thursday |
| Kingfisher..... | H. Violet Sturgeon, Hennessey | Henry C. Trzaska, Hennessey | |
| Kiowa-Washita..... | A. H. Bungardt, Cordell | Aubrey E. Stowers, Sentinel | |
| LeFlore..... | Charles Cunningham, Poteau | G. W. Hogaboom, Heavener | |
| Lincoln..... | U. E. Nickell, Davenport | Ross P. Demos, Stroud | First Wednesday |
| Logan..... | Webber Merrell, Guthrie | Phillips R. Fife, Guthrie | Third Tuesday |
| Mayes..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | Ralph Royster, Purcell | W. C. McCurdy, Jr., Purcell | |
| McIntosh..... | F. R. First, Jr., Checotah | W. A. Tolleson, Eufaula | Third Thursday |
| Muskogee-Sequoyah- Wagoner..... | L. S. McAlister, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
| Northwestern..... | R. G. Obermiller, Woodward | C. W. Tedrowe, Woodward | 2nd Thurs. Even Mo. |
| Okfuskee..... | A. S. Melton, Okemah | M. L. Whitney, Okemah | |
| Oklahoma..... | Onis George Hazel, Oklahoma City | Gerald Bednar, Oklahoma City | Fourth Tuesday |
| | | Mrs. Muriel Waller, Exec. Secty. | |
| Okmulgee..... | G. Y. McKinney, Henryetta | S. B. Leslie, Jr., Okmulgee | Second Monday |
| Osage..... | G. W. McDonald, Pawhuska | C. S. Stotts, Pawhuska | Third Thursday |
| Ottawa..... | Rex Graham, Miami | W. Jackson Sayles, Miami | Second Thursday |
| Payne-Pawnee..... | Howard Puckett, Stillwater | C. M. Rippy, Stillwater | Third Friday |
| Pittsburg..... | G. R. Booth, Wilburton | Homer C. Wheeler, McAlester | First Wednesday |
| Pontotoc-Murray..... | E. M. Gullatt, Ada | Ollie McBride, Ada | 1st and 3rd Wed. |
| Pottawatomie..... | J. N. Owens, Jr., Shawnee | F. C. Gallaher, Shawnee | Third Wednesday |
| Rogers..... | Roy Melinder, Claremore | P. S. Anderson, Claremore | |
| Seminole..... | J. D. McGovern, Wewoka | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Stephens..... | A. J. Weedn, Duncan | W. R. Cheatwood, Duncan | Third Wednesday |
| Texas..... | Glenn A. Hopkins, Guymon | Ronald McCoy, Guymon | |
| Tillman..... | F. P. Fry, Frederick | O. G. Bacon, Frederick | Second and Fourth Monday |
| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | John G. Matt, Tulsa | |
| Washington-Nowata..... | Felix Adams, Nowata | Mr. Jack Spears, Exec. Secty. | |
| Woods..... | John F. Simon, Alva | C. L. Johnson, Jr., Bartlesville | Second Wednesday |
| | | W. F. LaFon, Alva | Odd Months |

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne, Major—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1949.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

WHENCE—WHITHER

Whence cometh the present confusion with reference to medical practices and professional standards, the layman's dissatisfaction with medical service as now administered, and the clamor for some form of government medicine? Whither goeth the profession and the people?

Under the first question we must consider the mass psychology ever changing under the influence of socio-economic and political progress with increasing complexity and mounting controls ostensibly warranted by Federal paternalism, including expanding subsidies.

These destructive influences have been supplemented by the rapid increase in medical knowledge, the exacting task of acquisition, integration, assimilation and application. This task plus the marathon toward higher goals including the specialty boards, has so occupied the time of the practitioner the people have had little of his attention even though receiving good medical care. Psychologically, the patient has suffered and the unsuspecting physician has lost his traditional position in the hearts of the people.

The old time love, confidence and respect have been sacrificed upon the altar of scientific efficiency. Only the art of medicine can capture and hold the heart of the patient. Doctors must learn that all giving and receiving is reciprocal and that their contacts with patients should be mutually helpful and this helpfulness should be distinctly obvious. The physician who fails to comfort and elevate the spirit of the sick loses his own soul.

The answer to the second question is difficult but it may be said that, if we escape immediate socialization of medicine, it rests largely upon the physician's attitude toward the above principles. The preservation of the proper patient-doctor relationship is more difficult than ever before. Yet it is within our power and perhaps it is our only hope. Certainly we are under the spur of necessity. If physicians do not find a way to recover the love and respect of the

people they have brought into the world and kept alive with ever increasing comfort and longevity, the cause of medicine will be lost and we will begin the long trek back to the dark ages sans liberty, honor and integrity.

FREED OF PLAGUE BUT PLAGUED BY THE ENEMIES OF FREEDOM

Before medicine advanced to its present position in the prevention and control of disease and before our present use of animal experimentation, according to Boccaccio, it was like this: "How many memorable families, how many ample heritages, how many famous fortunes were seen to remain without lawful heir. How many valiant men, how many fair ladies, how many sprightly youths, whom, not other only but Galen, Hippocrates or Easculapius themselves, would have judged most hale, breakfasted in the morning with their kinsfolk, comrades and friends and that same night supped with their ancestors in the other world."¹

Now we can control disease because we have had generations of medical freedom. But now we are threatened with the kind of medicine Germany had. In principle, the kind that Russia has and the kind that is now corrupting Great Britain. In Germany medicine was mobilized for the purpose of killing. In Russia, longevity is not in the hands of medicine but in the power of the Kremlin. A natural death in government circles is so uncommon it upsets the wheels of progress. The power that socializes medicine strangles individual freedom and snuffs the flame of life when it flickers with the least wind of uncertainty. Socialization of medicine is the last straw. When it is on the crest, life is no longer worth saving. One glorious hour of freedom is worth an age of slavery. Now is the time to become militant in the cause of freedom. Do our lawmakers know what we think. Soon it may be too late.

1. Boccaccio's account of the Plague at Florence in the 14th Century. Quoted from Major's "Classic Descriptions of Disease." Springfield, Illinois, Charles C. Thomas, Publisher. 1945.

A SAD DAY

It was a sad day for American people when Franklin D. Roosevelt realized he had broken Harry Hopkins health pounding money down the W.P.A. rat holes and advised him to take a rest in Europe. The health of such a successful spender could not be jeopardized. Yet while regaining strength for his profligate propensity he was instructed to make the most of propinquity. Franklin D., realizing his close proximity to social security in Germany, Austria, and Italy, told him to learn the trick while resting.

Today everybody who works and thinks and tries to live on what he makes knows how well Harry learned the intricacies of this misnomer, this so-called social security. Every self respecting, self supporting citizen of the United States knows how this regulatory thief of freedom has also filched the money he might have saved with interest and robbed him of the opportunity and the chastening influence of initiating his own charity.

In spite of what has happened we are threatened with additional taxes through expansion of the social security program. In addition to the threat of compulsory health insurance with costs beyond computation, hearings are now under way on H.R. 2892 and H.R. 2893. In the April 14 issue of "American Medicine and the Political Scene" we find the following:

"H.R. 2892 proposes that the Federal Government shall enter the field of medical assistance. H.R. 2893 would step up the present old-age survivors insurance to include protection against permanent disability and would set the stage for protection against sickness. Furthermore, it would compel self-employed persons (physicians, dentists, lawyers, writers, shop keepers, etc.) to pay additional income taxes (called social security taxes) amounting to $2\frac{1}{4}$ per cent of net income *beginning with the calendar year 1949*.

"This tax would be in addition to all other taxes currently paid and would be levied on income up to \$4,800. It would amount to \$108 and would be payable as long as the person continued in his profession or business. The tax would be only for old-age, survivors, and permanent disability benefits. The tax for social security medicine under another bill would start at \$72 a year for the professional person earning \$4,800, and would go on up to possibly \$200 or \$300."

By nature, education, and experience, physicians are idealists and in the past as such they have been idealized. Not so in this new era, the time has come when physicians must fortify idealism with realism. The New Deal hiding under the guise of the Fair Deal makes it necessary for both patients and physicians to think in terms of dollars and cents, counting cents as dollars and dollars as billions.

According to recent estimates the world has mined 40 billions worth of gold since Columbus. Within the next year the administration plans to spend 45 billions. If Congress approves these plans the enormous annual cost of socialized medicine alone will within one year almost knock out the 24 billions buried at Fort Knox.

With these figures before us it would seem unnecessary to call attention to family costs, yet the people should be warned before they feel the pinch. In a recent editorial The Oklahoma City Times estimates that "The average bill for each head of a family in the United States, to pay this (the administration) budget will be \$1,300 or about \$3.60 per day."

The editorial continues with logical speculation on the immediate future.

"However the bill next year will be much larger if the laws urged by President Truman are passed. They include socialized medicine, public housing, federal aid for public schools, a huge program of farm subsidies and other large items, which will grow larger rather than smaller with the years. By the end of Mr. Truman's term the annual budget should reach 60 or 70 billion dollars or more — probably six or seven dollars a day for each average head of a family. It might reach 10 dollars a day if we accept the estimates of some Washington observers.

"To administer the tax program and the distribution of the vast amount of money it will take a much larger force of federal office-holders than at present. Instead of three million we may have five or six million employees."

If only our Founding Fathers who fought the American Revolution for "Rights of Life, Liberty, and The Pursuit of Happiness," and wrote them in the United States Constitution could convene in Washington today perhaps the political pigmies who seek to soothe the aching piles of a decadent people with the salve of paternalism would yield to reason and drag their dwarfed per-

sonalities out of the puerile picture.

Every physician should read the pending bills, make up his mind and urge his patients to let the people in Washington know what they think and what they want.

STRANGE PARADOX

Those who are living in the latter half of the average life span and enjoying this remarkable gift of modern medicine can remember when typhoid fever and diphtheria cursed the community, when smallpox came in periodic epidemics leaving a depleted population with pitted faces, when pneumonia and many other infectious conditions ran their course and took their toll, when in the immediate past cholera and yellow fever had decimated the land and laudable pus was the shibboleth of surgical skill, when sanitation had not found its present stride and when the people lived in fear of many diseases which are now deceased or under control.

The people blessed with this increased longevity in a world now relatively safe from the ravages of disease are cognizant of the preventive and curative gifts of medical science, and many of them realize that through medical discoveries, the ingenuity and cultivated skills of the profession, they are living twice as long as their progenitors a few generations removed. Having experienced the benefits of the uninterrupted evolution of medicine and being apprised of the fact that government with equal opportunities has failed in virtually every country where people were not already in serfdom and has robbed the governed of the last vestiges of individual liberty, why can they not see the "handwriting on the wall" and save for themselves and their children this heritage which has come to them through medicine as now practiced in the United States. Apparently the majority of the people in the world having undergone certain deplorably psychological changes are traveling on their stomachs seldom lifting their heads above the gimme, gimme level. They seem to be utterly unaware of the fact that paternalistic stock piles must dwindle to the prodigal sons' husks as ever increasing taxes destroy the taxable production of free enterprise. Under government control the stock pile of medicine will dry up and blow away.

If the trend is not checked, inevitably, the world, through the leveling process of socialism, must go hungry and sick.

ALL ROADS LEAD TO ROME

Romulus and Remus, with a bit of wolf's milk and a few peasant farmers from the hills near the Tiber founded Rome. Rome's population and commerce grew, her influence mounted, and her power was felt throughout the world. She became the apple of civilization's eye. But there was a worm at the core. Soon Rome was rotting at the center, centripetal decay set in and Rome went to hell.

The United States has centered power on the Potomac. The bureaucratic red-tape-worm at the core is a source of dry rot; the glory that was Washington is wasting. At one time all roads led to Rome. Today all roads lead to Washington. All inroads radiate from Washington. We are on the road to Rome, not to the imperial city on the Tiber but to the Rome of ruin now situated somewhere on the River Styx. It's a matter of hell-fire and damnation if the people do not rise up and save the nation.

Compulsory health insurance is only one of the threatened inroads upon our God given liberty. Our professions including the ministry should transcend this specific threat and fight for freedom. In spite of the late popular slogan the Four Freedoms, there is only one freedom and it lives on "fear and want." Let's fight because of fear and win because of want. May the God who inspired the love of liberty preserve this, our one and only personal and national freedom.

SUBSISTENCE WITHOUT SUBSIDY

According to Pliny the Elder, Cato said the agricultural population "produces the bravest men, the most valiant soldiers, and a class of citizens the least given of all to evil designs."

There being no subsidy, no government crop control, Cincinnatus "stripped to the work" was following the plow in the Quintian meadows on Vatican Hill when the messenger arrived with the dictatorship."

Continued government paternalism will destroy patriotism. We prefer to follow the plow and remain free.

ATTEND THE A. M. A.

SCIENTIFIC ARTICLES

JUVENILE DIABETES

C. ALTON BROWN, M.D.

OKLAHOMA CITY, OKLAHOMA

The diabetic child is defined as any patient in whom the onset of diabetes has occurred at 15 years of age or under — in the U.S. today there are some 38,000 such patients, of whom about 13,000 are under 15 years of age.¹

That the tendency to develop diabetes is inherited cannot be doubted. It follows the Mendelian law as a recessive characteristic and for this reason control of the spread of the disease may be sought by preventing intermarriage of families with diabetes. A history of familial diabetes is obtained in about one-quarter of all newly diagnosed patients — when the disease has been present in these patients for 10 years, the familial incidence rises to 50 percent. This is due to the development of new cases or to the discovery of old ones by diligent search of the family tree.

At the onset of the disease the child presents presumptive evidence of hyperactivity of the pituitary gland: his height, metabolism and bone and dental development are in advance of the normal for his chronological age and his puberty is precipitated. The final production of diabetes by injection of anterior pituitary extract had led to attempts at alleviation by pituitary inhibition.²

The younger the child is at onset of diabetes and the longer the condition has persisted prior to detection, the worse the prognosis. However, if the disease in a child is recognized and treated correctly, the prognosis is good, and he should be able to lead a normal life, notwithstanding the possibility of later complications, such as nephropathy, polyneuritis and ocular complications, after the patient has reached 15 to 20 years of age. However, if the onset occurs when the patient is under three years of age, the prognosis is poor.

The diagnosis of diabetes mellitus in the child is not ordinarily a difficult one to make. Because the disease is rather rare in patients under 15 years of age, one must have diabetes in his mind when seeing a patient. Too often a child will have to consult two physicians because a urinalysis will not have been made by the first examiner. The dextrose tolerance test, which has been of great value in the diagnosis of adult diabetes is not frequently employed in diagnosing diabetes in the child. Its chief value in the young patient is to eliminate the non-diabetic. The finding of dextrose in the urine, elevated blood sugars, both fasting and post-prandial, together with certain observations and symptoms which can be elicited, will usually make the diagnosis a rather easy one. The diagnostic levels for blood sugar used by the Joslin group are 130 mg. fasting, 170 mg. post-prandial, venous, and 200 mg. post-prandial, if capillary blood. The most common initial findings and symptoms in the order of their appearance are loss of weight, polyuria, polydipsia, enuresis, coma or acidosis, anorexia and fatigue.

Diabetes mellitus in the young differs from the disease in the adult. The onset is abrupt and violent. The disease is more severe than in adults. It is usually progressive and it is more labile than in adults. There is more definite relationship between juvenile diabetes and hyperfunction of the anterior lobe of the hypophysis than is the case in adults. The condition is not usually preceded by obesity or by degenerative changes. In planning the treatment these peculiarities should be taken into consideration. The chemical standards for control are glycosuria of less than 10 percent of the carbohydrate intake, a normal blood sugar level before meals and a blood cholesterol level below 230 mg. per 100 cc.³

The treatment consists of regulation of the diet, administration of insulin, adjustment of exercise, education of the entire family and protection of the child against himself. He must be taught the nature of his disease, its dangers and his part in the control, while at the same time he is educated to live happily with the disease.

McDaniel, Marble and Joslin studied the records of diabetic patients for the purpose of discovering any analogies between the cause of their diabetes and that produced experimentally in animals and to see if any patients could be found who seemingly were cured or had benefited by early energetic treatment. The records of those few patients were studied in whom at postmortem examination there were microscopic evidence of hydropic degeneration of the islet cells. Recent work has shown that at this stage of degeneration of islet tissue the process is reversible. The data showed that, although no cures can be claimed, early, vigorous treatment in certain patients with a restricted diet or insulin or both seemed to have brought about an unexpected degree of improvement. Many other patients treated in a like manner, responded with only the expected improvement. Resting procedures, such as fasting, fat feeding and insulin, prevent the degenerative changes from occurring in cells not already affected and permit the restoration of those exhausted cells, which still retain the ability of recovery. It is their policy to begin vigorous treatment with insulin and a moderately low carbohydrate diet with the required calories made up in fat. If, after a few weeks, there were no signs of improvement they would increase the diet to one of less carbohydrate restriction, assuming that by this time all beta cells which could recover had done so. They would be extremely slow in reducing the insulin dosage and diligent in its use with intermittent infections. They believe that the diabetic patient should be taught to guard his islet tissue as he does his toes and limbs.⁴

Brush, of New York City, has reported excellent return of function of the islets by large insulin dosage during the initial phase of diabetes. The technic consists of administration of four large doses of regular insulin for a period up to one month. Glycosuria is prevented and the insulin dose is reduced gradually as to prevent marked insulin reactions. After a month of this treatment the patient is discharged on a total dose of two to eight units of regular

insulin. The high glucose tolerance often lasts as long as two years. Brush feels that by relieving the hyperglycemia the islets are spared and a maximum recovery is attained.⁵

There are two schools of thought regarding the diet for diabetes. The free diets of Stolte and Lichtenstein were reported to have attained normal physical, emotional and sexual development without degenerative cardiorenal disease.

The other and most accepted school of thought is an attempt to maintain ideal control by controlling the glycosuria without serious insulin reactions, the diet being prescribed in grams and weighed at each meal. Growth has been satisfactory where control has been satisfactory. In the new diabetic it is imperative the management be exact so as to rest the pancreas. While in many diseases a patient cannot by any known means be restored to the normal state, it seems that maximum restoration ought to be attained by re-establishing as many normal physiologic functions as possible.

In the George F. Baker Clinic the caloric requirement is based on surface area. Since in childhood this follows age closely, calories may be prescribed accordingly — 1000 calories to an infant of one year with 100 calories added for each year of life. For girls a maximum of 2200 calories is reached at the age of 13 years. As soon as possible after maturity, the caloric prescription for girls should be reduced to avoid the obesity common in female adolescents. The maximum caloric diet prescribed for boys is 2800, a point reached at the age of 19 years.

The composition of the diet should be 40 percent carbohydrate, 20 percent protein and 40 percent fat of the total caloric intake. For example, an eleven year old child's diet would consist of 2000 calories with 200 gm. of carbohydrate, 90 gm. of protein, and 100 gm. of fat.

The carbohydrate for the day should be divided into fifths giving one-fifth at breakfast, two-fifths at noon and two-fifths at night. Enough carbohydrate should be subtracted to give a mid-afternoon and bedtime feeding. The bedtime carbohydrate is combined with protein and fat in order to prevent an insulin reaction during the night when protamine zinc insulin is used.⁴

Insulin is administered to all diabetic children from the day of recognition of the disease. The insulin of choice must vary

with each patient. Regular insulin alone is seldom satisfactory for a child over 1 to 2 years of age. Different clinics find different combinations or mixtures best suited to them. Dr. Peck, of Indianapolis, favors the premixed insulin, usually the 2:1 ratio of regular and protamine zinc. The Joslin group has favored a combination of protamine zinc and regular insulin given in two separate injections simultaneously before breakfast. Recently they have been using a buffered, specially modified protamine zinc insulin combination called NPH50. This closely resembles the action of the 2:1 mixture except for the mid-morning rise in the blood sugar which is compensated for by a rearrangement of the carbohydrates. Twenty or 30 grams are taken from the breakfast and given as the bedtime feeding, thereby maintaining a relatively normal blood sugar curve during the 24-hour period. All the children at the Joslin camp were changed to this insulin during the past summer with excellent results. Both the 2:1 mixtures and NPH50 occupy the same general zone of time-activity. The type of action exemplified by either product approaches most closely to the ideal desired. Either preparation appears capable of meeting the normal physiologic needs of the average diabetic patient by providing sufficient insulin to meet daytime requirements and a long enough duration of action to maintain proper levels in the fasting state, since both provide moderate over-lapping effects.⁶

The third essential in the treatment of diabetes is exercise. Premeal rest periods and postmeal exercise are advocated. The patient as well as the family must be taught that diabetes is an exercise disease and when properly utilized is a definite adjunct in the well-controlled patient.

Practically all diabetics present behavior problems during a portion of their childhood. They usually will adhere to strict

management for the first year, after which indiscretions occur. The diabetic routine seems to conflict with the social success of the patient. Fortunately this rejection of treatment does not usually last longer than a couple of years. If it is long and bizarre, psychiatric investigation is indicated.

Controllable and seemingly uncontrollable complications occur during the course of diabetes in the young patient. Coma, infections, hepatomegaly, some of the skin complications and failures of growth and development are now correctable. The degenerative and deficiency diseases remain unsolved.

The severity of the disease in the child, as well as the occurrence of irregularities of diet, the omission of insulin, and infections, account for the relatively high incidence of coma. The treatment differs little from that in adults, consisting largely of three measures — insulin, fluids, and gastric lavage. The prognosis for recovery, unless the patient has a lethal infection or is actually moribund before treatment is started, is excellent.

To help a diabetic to live almost as long as the non-diabetic, and actually competing with them, means that the physician who conscientiously treats the juvenile diabetic is bound to receive the most satisfactory rewards possible, the gratitude of the parents of such a patient and the saving and maintenance of a life for useful service. Such are the things which make the practice of medicine worthwhile.

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DO YOU KNOW?

That physicians who are A.M.A. members but NOT Fellows will be admitted to the general, scientific and other meetings at the Atlantic City convention, June 6-10, as well as to the exhibits? They may not take part in any of the official proceedings, however. All physicians who are members of their state medical associations are members of the American Medical Association.

UNUSUAL STRANGULATED HERNIAS IN INFANTS

HARRELL C. DODSON, JR., M.D.

AND

HAL A. BURNETT, M.D.

OKLAHOMA CITY

Strangulation of inguinal hernias in children is relatively uncommon. Of all children under 12 years of age with inguinal hernias, only about two in one thousand develop the complication.^{1 2 3} Ladd and Gross⁴ state that incarceration and strangulation are most frequent in the first six months of life. Of 1487 cases of strangulated hernia studied by Frankau,⁵ 38 (2.5 percent) were in infants under two years of age. The majority of strangulated hernias contain small intestine. However, other viscera are occasionally encountered. Cecum, sigmoid colon and adnexal structures are the most frequent.⁶ The two cases to be reported are interesting because of the patients' ages and the organs involved.

The first case is an 11-day old negro male infant in whom the vermiform appendix was strangulated in a persistent processus vaginalis. Pouyanne,⁷ O'Neill,⁸ Molla⁹ and Lilienthal¹⁰ have reported similar cases. The second case is a four-week old white male infant in whom a strangulated hernia with secondary infarction of the testis occurred. Ladd and Gross⁴ exhibit the specimen from a similar case. Other cases have been reported by Golden and Hamilton,¹¹ Rosenblatt and Bueermann.¹²

REPORT OF CASES

CASE I. An 11-day old negro infant was admitted to the Crippled Childrens Hospital on July 31, 1948 with a tender swelling of the scrotum. The swelling appeared 36 hours previous to admission. Thereafter, the child was listless, fretful and refused all feedings. Three hours prior to admission he vomited twice. Bowl movements had been normal in frequency and consistency.

On admission the rectal temperature was 101° F, the pulse rate 136. The respiratory rate was normal. No abnormalities of the head, neck, heart and lungs were noted. An easily reducible protrusion about 1.5 cm in

diameter was present at the umbilicus. The abdomen was soft; no masses were palpable. Sounds of peristalsis were as usual. Rectal examination was negative. An irreducible, elongated, globular, 3 by 2 cm. mass filled the right side of the scrotum and extended into the inguinal canal. The overlying skin was red and edematous. Gentle palpation of the swelling produced vigorous crying. The mass transmitted light poorly. The scrotum, testis and spermatic cord on the left were normal to palpation.

Urinalysis gave negative results. The red blood cell count was 4,410,000; the hemoglobin content was 11 grams per cent. The white blood cell count was 12,550 with 82 per cent neutrophils. The Mazzini test of the blood was negative. A roentgenogram of the chest disclosed clear lung fields. A film of the abdomen revealed no unusual accumulations of gas in the intestines.

At operation three hours after admission, the right testis and spermatic cord were indurated and covered with a plastic exudate. A patent processus vaginalis contained the vermiform appendix which was dull black, friable and surrounded by fibrinous exudate. The cecum was at the internal inguinal ring and the appendix projected distally to the superior pole of the testis. The appendix and its mesentery were ligated close to the cecum and removed. The continuity of the processus vaginalis was interrupted and the peritoneal cavity closed with a purse string suture. Hernioplasty of the Ferguson type was effected.

Examination of the specimen revealed gangrene of the appendix. (Fig. 1).

The patient's subsequent course was uneventful and he was discharged from the hospital on the tenth postoperative day. One month later the wound was well healed and the child was apparently well.

CASE II. A white male, aged four weeks,

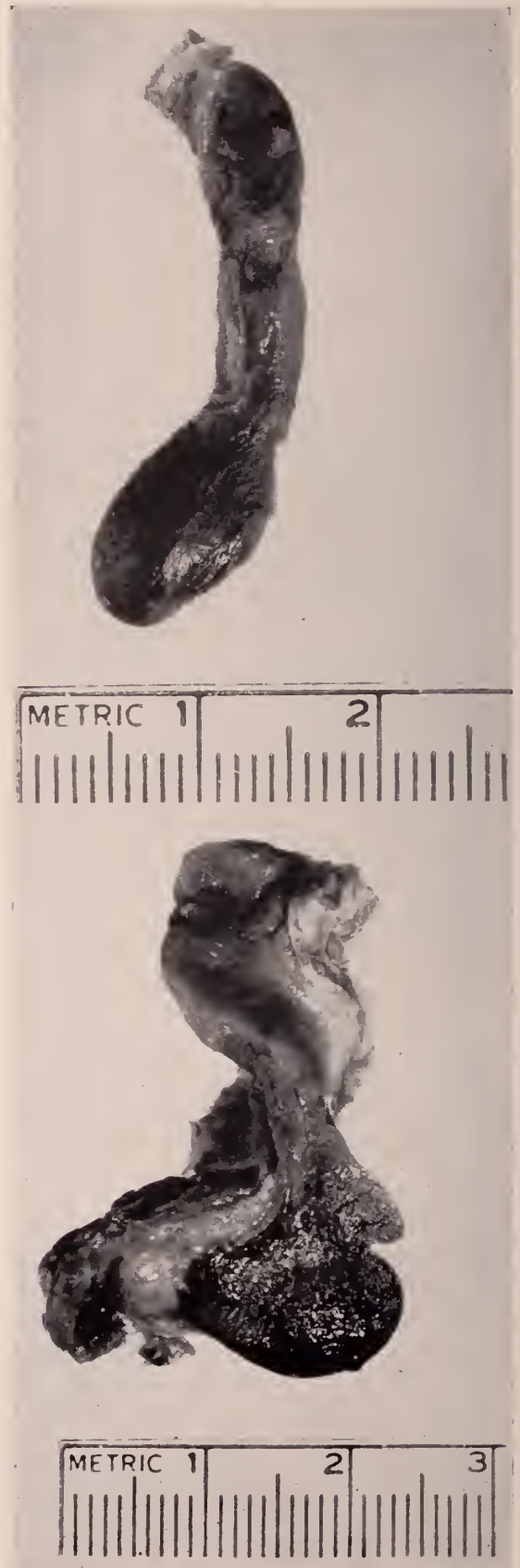
was admitted to the Crippled Childrens Hospital on March 3, 1948. Four days prior to admission he became fretful and cried out at frequent intervals as if in pain. He vomited several times during the day. Shortly after onset of symptoms, the mother discovered a swelling of his scrotum. During the following three days, the child vomited all feedings and had no bowel movements. The scrotal swelling increased and the abdomen became prominent.

On admission the infant was listless and irritable. He vomited thin, yellow material. There was evidence of marked dehydration. The rectal temperature was 101.2° F., pulse rate 160 and respiratory rate 60. The head, neck, heart and lungs were as usual. The abdomen was distended and tympanitic. Tenderness and rigidity were not evident. Infrequent, loud peristaltic rushes were audible over the lower abdomen. A tender, irreducible, globular, 4 by 2 cm. mass filled the right side of the scrotum and inguinal canal. The mass did not transilluminate. The testis and spermatic cord could not be identified. The scrotal skin over the mass was taut and discolored dull red. The scrotum, testis, spermatic cord and inguinal canal on the left side were normal.

The urine was yellow and cloudy. The pH was 6.0, specific gravity 1.030. There was a trace of glucose but no albumin, acetone or cells. The red blood cell count was 4,500,000; the hemoglobin content was 12 grams per cent. The white blood cell count was 6,800 with 72 per cent neutrophils.

At operation three hours after admission, a vaginal (congenital) type of hernia was found. The hernial sac contained about five cc of light pink fluid and a loop of edematous, dusky red ileum six cm. long which was constricted at the internal inguinal ring. The internal spermatic vessels were thrombosed up to the internal ring; the testis and epididymis were dull black and friable. On release of the constriction at the internal ring, circulation was promptly restored to the segment of ileum. The bowel was returned to the abdominal cavity. The spermatic cord was mobilized up to the internal ring where it and the neck of the sac were ligated. The cord, epididymis and testis were removed, together with the sac, after division of the gubernaculum testis. Hernioplasty of the Ferguson type was performed.

Examination of the specimen revealed hemorrhagic infarction of the testis and epididymis. (Fig. 2).



The postoperative course was uneventful. Bowel movements resumed in 12 hours. Feedings were started in 24 hours. The child was afebrile after the first day. He was discharged from the hospital on the tenth postoperative day. One month later, the wound was healed and there was no evidence of recurrence. The left inguinal region and the left testis appeared normal.

COMMENT

In children with incarcerated and strangulated hernias, gangrene of the intestine is rare. Of 106 cases studied by Thorndike and Ferguson,³ resection of the gangrenous bowel was necessary in only four instances. Therefore, reduction by conservative measures can be safely accomplished in a majority of cases. Reduction of non-viable intestine by properly performed measures is extremely unlikely. However, it is advisable to recognize that occasionally the blood supply of the testis may be irreparably damaged in the presence of viable hernial content. In view of this possibility, immediate operation without an attempt at non-operative reduction is preferred in cases of long duration or in those with evidence of intra-scrotal vascular changes. It should also be realized that abdominal viscera other than

intestine are occasionally encountered in strangulated inguinal hernias. Because of the usual absence of intestinal obstruction in such cases, the true condition may be overlooked and operation unfortunately delayed.

SUMMARY

Two cases of strangulated inguinal hernia in infants are reported, one with secondary infarction of the testis, the other with strangulation of the vermiform appendix.

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MEET OUR CONTRIBUTORS

George K. Stephens, M.D., Ada pediatrician, is the author of "Diagnosis and Care of Pyloric Stenosis by the Pediatrician." Dr. Stephens attended Hendrix College, Conway, Ark. and was graduated from the University of Arkansas School of Medicine in 1933. Serving an internship at St. Mary's Group of Hospital at St. Louis, Mo., he practiced at Sherman, Texas, White-wright, Texas and was in the U. S. Army Air Corps before coming to Ada.

C. Alton Brown, M.D., Oklahoma City, was graduated from the University of Oklahoma School of Medicine in 1943. The author of "Juvenile Diabetes" in this Journal, he served his internship and residency at St. Anthony's Hospital in Oklahoma City. Dr. Brown is a member of Phi Chi and was in the army medical corps.

Joint authors of "Unusual Strangulated Hernias in Infants" are *Harrell C. Dodson, Jr., M.D.*, and *Hal A. Burnett, M.D.*, both of the University of Oklahoma School of Medicine, Department of Surgery. Dr. Burnett was graduated in the O. U. School of Medicine in 1943 and served in the army. Dr. Dodson attended Oklahoma A. and M. College and was graduated from the University of Oklahoma School of Medicine in 1941.

TWENTY-FIVE YEARS AGO

Dr. C. E. Sexton, Stillwater, was recently initiated into La Societe des 40 Hommes at 8 Chevaux, Voiture Locale No. 488, the super-service organization of the American Legion.

Payne County medicos and their ladies enjoyed a delightful evening at Drummright May 1, as the guests of the Creek County doctors and their wives. The Payne County Medical Society wishes at this time to thank the Creek County "brothers of the trade" for the aforesaid hospitality.

Oklahoma University Medical School enrollment for 1924-25 is filled, according to Dr. L. A. Turley, assistant dean. Seventy-five names now are being considered from which 50 will be permitted to enter the freshman class next September, Doctor Turley said. More than 75 others have been refused entrance and no further applications for enrollment will be received. This is the third year the medical school has had to close enrollment and turn away students on account of inadequate facilities to accommodate the number desiring admission, the assistant dean said. Only Oklahoma students are considered and all these cannot be permitted to enter. When the new medical school building, now being constructed, is completed, the medical school will have facilities for a large increase in the number of annual entrants, he added. This building will be completed about December 1, 1924.

DIAGNOSIS AND CARE OF PYLORIC STENOSIS BY THE PEDIATRICIAN*

GEORGE K. STEPHENS, M.D.

ADA, OKLAHOMA

Pyloric stenosis is the most common condition requiring surgical treatment in the first few months of life. The greatest percentage of papers discussing this subject are presented by surgeons, and only a certain amount of thanks is given to the pediatrician for referral and assistance.

Pyloric stenosis is a condition in which the pediatrician and surgeon should work together as a team. The pediatrician is usually consulted for a change in formula for what seems to be a simple upset, and surgery has never entered the minds of the parents. Early diagnosis of this condition is being made more and more often.

Schaefer¹ reports 232 cases of pyloric stenosis operated at Milwaukee Children's Hospital between 1924 and 1947. There have been no deaths during the past 10 years.

ETIOLOGICAL FACTORS

Pyloric stenosis is most often seen in the male. Schaefer's¹ series shows a preponderance of 6.5 males to one female, or 86 per cent in males. Ladd² reported 85 per cent, and Fredeen 78 per cent. I have never seen a female infant operated on, but only recently a child of five was in my office with a scar and the parents said the operation was for pyloric stenosis.

The onset of symptoms usually is within the first two weeks of life, the majority of operations being performed between the ages of three and six weeks.

SYMPTOMS AND DIAGNOSIS

The cardinal symptoms of pyloric stenosis are:

- (1) projectile vomiting
- (2) failure to gain weight
- (3) constipation
- (4) visible peristaltic waves
- (5) palpable pyloric tumor.

With the onset of symptoms of vomiting, our first consideration in these cases should be to make an effort to stop the vomiting but while attempting to do so, we must be certain that the weight and nutrition of the child does not suffer. The percentage of cases of pyloric stenosis that develop fol-

lowing an occasional symptom of vomiting under one month of age is small, but not so small that serious consideration isn't important in recognizing an early pyloric spasm and treating it properly. The more difficult cases seen by the pediatrician are those that have been put off as "normal spitting up" until malnutrition and dehydration have developed resulting from a true stenosis. Possibly, if properly supervised in the stages of pyloro spasm, the stenosis could have been prevented. Naturally, the number that are prevented will never be known.

With the onset of projectile vomiting, all the other symptoms follow inevitably. The vomiting is described as being "explosive," or, "shooting out, hardly touching the crib." It may occur one to two hours after the feeding and the amount vomited suggests more than one feeding. This condition is the only type of intestinal obstruction in which the stomach manifests ability to retain food for many hours.

Along with the vomiting, loss of weight is a natural result. It is the responsibility of the pediatrician at this stage to prevent what Schafer¹ reports as occurring in 80 percent of his cases, that is, undernourishment and dehydration.

The rapidity of onset varies; I have seen one patient in the past year manifesting complete obstruction proven by X-ray less than one week after the parents noticed the first vomiting.

It is my policy to X-ray each patient, because it is the most definite verification of the diagnosis. The X-ray proof of the diagnosis is also a very convincing point to place before the parents when they are told that their one month-old infant requires surgery to relieve its vomiting. In the more advanced cases seen in the rather extreme degree of malnutrition and starvation, the diagnosis of pyloric stenosis can be almost positively made from history, but the X-ray is still a worthwhile procedure in the diagnosis. Many authorities frown on this procedure, but it is very easy to lavage the stomach after X-ray and proceed to surgery.

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948.

The visible peristaltic waves can usually be seen if the examiners will be patient and wait for them after offering any liquid. The palpable tumor is present in every case, but often it is difficult to feel. Yet the surgeon often is surprised by the size and firmness of the tumor.

TREATMENT

If the child is first seen near the onset of the symptom at one to three weeks of age, and the nutrition is good, medical treatment for ordinary pyloric spasm should be begun immediately. One of the first procedures would be to offer a low fat formula, using a lactic acid, skimmed cow's milk formula, or a powdered milk such as Alacta or Dryco. At the same time I prescribe Elixir Donnatal, which has proven to be a worthwhile addition to the medical control of these patients. Ten to 15 drops before each feeding has proven more beneficial than the phenobarbitalatropine solution that has been used for years.

Atropine, in a 1-1000 solution, using one, two, or three drops at each feeding, is still worthy of trial. The frequency and amount of feedings offered the infant depend upon his demands. It is best not to give too large a quantity at one time, and allow very little handling of the child, and to insist on his being held to be fed, making every effort to eliminate swallowed air. If the case is a simple spasm and there is no intercurrent infection or evidences of any other gastrointestinal infection, usually this procedure will remedy the situation. Jacoby³ leaves the impression that in England the medical treatment is attempted for a long time and usually with more encouraging results.

If the symptoms continue or become worse and there is no weight gain and there is a decrease in the urine output, and the antispasmodics are not helping, it is best to X-ray immediately to check the degree of obstruction. Thick feedings at this stage have been used with varying degrees of success for many years. The procedure is more of a hospital routine and I have not used it in recent years.

The second type manifests signs of dehydration, scanty urine, and a long history of vomiting. These infants may be from eight weeks to three months of age when seen. They will often reveal the typical pattern of the stomach with the visible peristalsis. X-rays should be taken and when the obstruction is proven beyond a doubt, immediately begin to restore the electrolytes of the blood in preparation for surgery.

All cases of pyloric stenosis are dehydrated to some degree when surgery is advised. The restoration of electrolytes is a primary objective in combatting all phases or degrees of dehydration in malnutrition. Akin⁴ reported a splendid outline of care for the more extremely malnourished infants. I have used intravenous fluids only in the more acutely dehydrated infants and in these cases usually do a venesection and give repeated blood transfusions of 75-100 cc.

Mead-Johnson's new triple threat Amigen⁵ alternated with Hartman's solution or five per cent glucose subcutaneously are certainly suitable types of parenteral fluids to restore most any degree of dehydration. I have used Upjohn's⁶ new subcutaneous preparation on two patients in recent months and feel that it is equally as valuable in the extreme degrees of dehydration from pyloric stenosis as we have found it helpful in our severe electrolyte upsets in infantile diarrhea.

In addition to the subcutaneous or intravenous fluids for restoration of body fluids, I have found to my surprise, that plasma given orally mixed with a sweetened water solution as a diluent will be taken readily and retained by all of these infants. In five cases in the past 18 months, I have diluted ordinary blood plasma equally with a five per cent dextrimaltose solution and offered it to the pyloric stenosis patients after obstruction was proven by X-ray. In each of these cases, they were able to retain this solution in large quantities right up to within a few hours of the operation.

Oral plasma feedings were first recommended by John Loehle, M.D. of Lebanon, Pa.⁷ I began using regular Red Cross blood plasma before surgery and soon after surgery, and I feel that this life-sustaining fluid has proven equally as helpful orally as it has intravenously.

It is most important to remember that pyloric stenosis is no longer considered an emergency. A waiting period of 24 to 48 hours to get the patient in good condition is perfectly safe and desirable.

The pediatrician must assume the responsibility of the general condition of the infant for surgery. The Fredet-Rammstedt operation has made surgery in these children rather safe. The pediatrician should be present during the operation because he will have a clearer concept of how to supervise the postoperative period after witnessing the condition of the patient at the time of the operation.

We have used a small amount of ether as the anesthetic except in the almost moribund cases where local novacain is preferable. The stomach should be lavaged with normal saline a short time prior to surgery and the catheter may be left in the stomach. Nembutal suppositories are a suitable pre-operative medication along with 1/500 of a grain of Atropine.

Smooth convalescence may be jeopardized to some degree if a suture is required to stop the bleeding of the duodenal artery. However, in the last case where this was necessary, gelfoam was used with no signs of complications.

Following surgery, it is my policy to offer sterile distilled water within two to three hours, beginning with one or two drams and increasing within several hours to half an ounce. Six to eight hours following surgery, the plasma dextrose-maltose solution is begun in small amounts. In 12 to 18 hours, when a minimum of half an ounce has been repeatedly retained, milk feedings are begun.

Very few of my patients have had breast milk available, so it is my policy to use either Dryco or Alacta, alternating every 30 minutes to an hour with the plasma solution for the next 24 to 36 hours. Following this, the milk formula can be increased rapidly to as much as four to five ounces every three hours, satisfying the thirst with either water or plasma between times.

Nembutal suppositories serve as suitable sedatives and only the more severely dehydrated infants require more than one subcutaneous injection following surgery.

Following this routine there has been very little persistent regurgitation and no

real vomiting after the effects of the ether have passed. Most of our patients in the past year have been able to go home in four to five days after operation, the stitches were removed approximately a week later in the office, and there have been no fatalities.

SUMMARY AND COMMENTS

Pyloric stenosis may be considered always to be preceded by pyloric spasm. Careful attention should be given to the three to six weeks old infant who vomits, and close attention at this period will help prevent many a true stenosis.

Elixir Donnatal has brought about improvement in the medical treatment at the early onset of symptoms.

X-ray should be routinely used in the diagnosis.

Restoring the electrolytes and relieving the dehydration should be well accomplished before surgery.

Subcutaneous amigen solution and the use of oral plasma have proven to be advancements toward this objective.

The Fredet-Rammstedt operation is a relatively simple procedure, but only in experienced hands.

The use of oral plasma and milk feedings soon after surgery have been a great factor in returning the infant to a normal state of nutrition.

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4. Akin, John T., and Forbes, Gilbert B. Surgery (April) 1947, 21:4.
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CERTIFICATES READY

Certificates are now ready for mailing to former medical officers who served during the war with the designation as Flight Surgeons. The certificates, which are suitable for framing, indicate that the officer concerned was graduated from the Aviation Medical Examiner's Course given at the U. S. Air Force School of Aviation Medicine, Randolph Air Force Base, Texas. Those who are eligible to receive the certificates may secure them by writing direct to The Air Surgeon, Headquarters, U. S. Air Force, Washington 25, D. C. Officers now on active duty are not eligible to receive the certificates.

TEXAS RELEASES DIRECTORY

The new edition of the Handbook and Directory of the State Medical Association of Texas has been released. The 478 page blue book is a collection of pertinent information relative to doctors, dentists, nurses and hospitals. In addition to information on medical economics by counties, the cloth-bound volume lists the membership of Texas Graduate Nurses Association; membership of the Texas Dental Society; names, locations, and data on recognized hospitals; and a criss-cross membership of the State Medical Association of Texas.

CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Urology*

HOWARD C. HOPPS, M.D. AND J. H. DUNN, M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HOPPS: The patient we are to discuss today had been seen at the University Hospital intermittently for a period of about five years, during the course of which he developed a variety of signs and symptoms which was proved difficult to resolve into a definite diagnosis. We are happy to have with us Doctor Dunn, a recent addition to our Staff, who will evaluate the clinical aspects of this case.

PROTOCOL

Patient: A. B., 65-year-old white male. Admitted February 22, 1942. Died March 4, 1942.

Chief Complaint: Difficulty in urination.

Present Illness: About seven years before admission the patient began to have nocturia two to five times which was particularly marked in wet weather. Soon thereafter he noticed that the force of his stream became progressively less. These symptoms became increasingly more severe until about two years after their onset when he suddenly became unable to pass any urine whatsoever. His local doctor catheterized him at frequent intervals for about a week and then referred him to this hospital. He was admitted in March, 1937. At this time his only other complaint was a chronic "cigarette" cough with occasional production of small amounts of greenish colored sputum. His prostate was found to be two times enlarged. He was treated with testosterone and frequent catheterizations. A few days after admission he began to have fever and both testicles gradually became hot and swollen. A right orchiectomy and a "bottle" operation on the left testicle were done. Microscopic examination of the removed testicle was reported as "chronic orchitis." The operative wounds healed slowly. He was discharged after two months hospitalization.

Shortly after his return home the scar of the orchiectomy broke down and began to drain, and the left testicle again became hot and swollen. He was readmitted to the hospital a month later and treated with hot packs and drainage. The lesions again slowly healed. For a while he then had few urinary symptoms, and it wasn't until a year later that he again began to have dribbling and nocturia. However, once he began to have difficulty again, he had several episodes of acute urinary retention and was catheterized each time by his local physician. On two different occasions the old sinus in his right scrotum broke down, drained and spontaneously healed after several weeks. In July, 1939, he was again admitted to University Hospital because of a recurrence of the swelling and redness of the left testicle. For several weeks he had required two or three catheterizations per week. He was again treated with hot packs and slowly responded. Cystoscopy revealed enlargement of both lateral lobes so great that the scope could not be passed. For the next year and a half he continued to have severe urinary difficulties. The recurrent episodes of acute retention continued. In addition, he began to have gross pus and occasionally gross blood in his urine. He suffered from anorexia, marked malaise and began to lose weight rapidly. Finally, after three days of complete retention he was unable to catheterize himself and was admitted for the last time.

Past and Family History: Not recorded.

Physical Examination: T. 99°. P. 110. R. 20. BP not recorded. He was markedly emaciated, dehydrated, mentally confused and appeared much older than his chronological age. There was marked oral sepsis.

Heart and lungs were recorded as "essentially negative." The external genitalia were not remarkable save for the healed surgical incision and missing right testicle. The prostate was three times enlarged, smooth, firm and symmetrical. The urinary bladder was distended to two fingerbreadths below the umbilicus.

Laboratory Data: Repeated urinalyses showed sp. gr. varying from 1.010 to 1.014, proteinuria consistently 2+, RBC's varying from occasional to innumerable and WBC's were innumerable with numerous clumps. On admission the NPN was 315 mgm. percent and several subsequent determinations varied from 130 to 180 mgm. percent. The creatinine was 5.88 mgm. percent on the day of admission, but later fell to 1.25 mgm. percent. Initially the CO₂ combining power was 29 vol. percent and in response to therapy was later reported at 44 vol. percent. The Kahn was negative. The peripheral blood contained 8 gm. percent hemoglobin, 3.3 million RBC's/cu.mm., and 6,250 WBC's/cu.mm. with 70 percent neutrophiles.

Clinical Course: On admission he was catheterized and 950 cc. of "creamy urine" were obtained. The bladder was irrigated and the catheter left in place. He was hydrated with parenteral fluids, and he improved somewhat. However, it was difficult to keep the indwelling catheter draining, so on the fourth hospital day a suprapubic trochar puncture was done under local anesthetic. Despite this and other symptomatic and supportive therapy he spiked a daily temperature as high as 104°. On the ninth day he died.

CLINICAL DIAGNOSIS

DOCTOR DUNN: The problem today, from a clinical point of view, concerns a white male who at the age of 58 years developed obstructive urinary symptoms. This is about the age at which mild obstructive symptoms most commonly develop. There was no definitive treatment and the patient continued without too much difficulty for about two years. At this time he suddenly developed high grade obstruction with acute urinary retention which necessitated catheterization. Because he continued to be obstructed, he was referred to the University Hospital. Upon examination his prostate was found to be approximately twice its normal size. Treatment at that time, 1937, (five years before his death) consisted of repeated catheterizations and testosterone. Among other things, this case illustrates the untoward

effects which may be expected to follow repeated catheterizations. When the patient is unable to void satisfactorily over a period of time there should be installed an indwelling urethral catheter in order to minimize the trauma and danger of infection which so often follows repeated catheterizations. In 1937 testosterone was a relatively new drug, and I assume that he was given this drug in the hope that there might be some reduction in size of the prostate with alleviation of obstructive symptoms. I think enough time has elapsed now that we can properly evaluate testosterone and can generally agree that it is not a desirable drug for the conservative treatment of prostatic hyperplasia, and certainly not for treatment of carcinoma of the prostate. Shortly, in reaction to all these repeated catheterizations, the patient developed fever, with swelling, tenderness, etc. of his testicles. Practically all inflammatory lesions involving the contents of the scrotum begin with epididymitis as the primary lesion. Secondary to epididymitis the patient may or may not get orchitis. In any event, physical examination should differentiate the epididymitis from the testes proper, or from the tunica, and thus determine precisely what structure or structures within the scrotum are involved. This inflammatory process involving both the testicles became severe enough on the right side to warrant removal of the right testicle. On the left side, we are told, a "bottle" operation was performed. From this we are forced to assume that the patient had an inflammatory hydrocele — a "bottle" operation being excision of the tunica vaginalis, perhaps removing part of the tunica, and turning the tunica back around so that the sac has been obliterated and the hydrocele cannot form again. At this particular stage of development, the most logical assumption is that the inflammatory lesion in the scrotum involving both testicles, one more severely than the other, represents a non-specific inflammatory process of a type which is not infrequently seen following repeated catheterizations in patients with long-standing urinary tract obstruction. We are not told what urinalysis revealed, but no doubt by this time the patient had a urinary tract infection.

The pathologic report on the right testicle is reported as chronic orchitis. At the moment, this appears to be sufficient, but a little later on we begin to wonder about the adequacy of this diagnosis. Almost cer-

tainly when that testicle was removed, the epididymis was also removed, but the pathologist has given us no information as to what that epididymis looked like. We also have no indication as to whether the inflammatory reaction was non-specific, or whether there was some suspicion that it might have been tuberculous. After the operation the wound healed slowly and the patient again developed an inflammatory reaction of the left scrotal contents, presumably epididymitis. Furthermore, the scar on the right side of the scrotum broke down and drained. About a month after he was dismissed from University Hospital he was readmitted because of this condition. At this time one begins to consider that this may be a tuberculous infection. Treatment, according to narrative report, was hot packs and drainage. We aren't told what was draining, I don't know whether a catheter was placed in the bladder or whether there was surgical drainage on the left side of the scrotum. Under this treatment the patient got better. We continue to suspect tuberculosis of the genital tract, but our clinical and laboratory data is insufficient to warrant such a diagnosis. About 18 months prior to his final admission the patient again developed acute episodes of complete retention requiring catheterizations. This became associated with weight loss, anorexia, malaise, etc. For three days immediately prior to the final admission the patient had been unable to void and had found it impossible to catheterize himself. Prior to this you will notice that a cystoscopy had been attempted, but that both lateral lobes were so greatly enlarged that the scope couldn't be passed. As a rule, under anesthesia, you don't have any trouble passing the cystoscope no matter what the size of the prostate is. It is true that sometimes you can't see too much, but generally cystoscopy is impossible only when one is dealing with infectious or traumatic strictures.

The patient was admitted to the hospital in a state of acute illness, with urinary retention of three days duration, culminating a disease process of at least five to seven years. Certainly any patient who continues to have a recurrent type of epididymitis, if it is proved to be non-tuberculous, should have both his vas deferens ligated to prevent further difficulty. If it is tuberculous, epididymis and testis should be removed. If the testis is directly involved in the tuberculous process, the vas should be left on the outside to drain, thereby minimizing the

complication of wound breakdown, as happened in this case. The man may have refused surgery, we don't know, there may have been some other complicating factors of which we are not aware.

Upon catheterization in the hospital, 950 cc. of creamy urine were recovered. We don't know exactly what the man meant that wrote this. Generally, if you see a creamy urine, or rather buttermilk-like, one thinks of a diverticulum in the bladder or of a very long standing chronic infection, i.e. pyonephrosis. Tuberculosis rarely gives a creamy urine unless there is an overwhelming secondary infection. At this time the patient's prostate was three times the normal size, smooth, symmetrical and firm. At the time of admission, NPN was up to 315 mg percent and creatinine was a little over 5 mg percent. The patient was acidotic — CO_2 combining power was 29 vol. percent. Hb was 8 gm percent. An indwelling catheter was inserted and an attempt was made to correct the fluid and electrolyte balance, with some degree of improvement. Uremia, which is a clinical diagnosis, (azotemia being the chemical one) improved — NPN came down to vary between 130 and 180 mg percent. His CO_2 combining power rose to the very lower limits of normal. Because of very thick, tenacious, purulent drainage there was difficulty in keeping the catheter open and on the fourth day after admission a suprapubic trochar puncture was done to establish more adequate drainage of the bladder. Following this the patient began to run a somewhat septic course. He became progressively worse, expiring on the ninth day after admission — on the fifth day after the cystotomy had been effected.

Now, what are we dealing with? It's pretty difficult to put all the pieces of a jigsaw puzzle back together, especially if a few of the pieces are missing, so we'll speak more or less in general terms. Here we have a man who, for a number of years, had an obstruction at the outlet of his bladder. As time goes on the obstruction gets more severe, the bladder eventually reaches the stage of decompensation, meaning by that that the bladder is unable to muster up enough power to force urine past the obstructed vesicle outlet. When the patient reaches this stage, he has residual urine. Under these conditions there will invariably develop a urinary tract infection which can not be eradicated until the obstruction has been relieved. This is accompanied by dilatation of the bladder, (often diverticulæ de-

velop) retrograde dilatation of the ureters, renal pelves and renal calices, with infection ascending into the kidneys. If the condition is sufficiently prolonged and the damage is extensive enough, pyonephrosis is the ultimate effect. When there is stasis, dilatation and infection, this provides very fertile ground for the formation of stones, either in the bladder or in the upper urinary tract, and when that condition goes on either with or without stones for a sufficient length of time, progressive destruction of renal tissue ultimately leads to renal failure, as this patient illustrates. That is the pathologic process that develops in an untreated case of urinary tract obstruction. We have been suspicious since about half way down the page on our record here that we might be dealing with tuberculosis. This is principally because the right scrotal scar continued to break down and drain periodically. However, I don't see that we have enough clinical evidence and certainly no laboratory data to support a positive diagnosis of tuberculosis either of the genital tract or of the urinary tract.

As far as the terminal illness goes, this patient presented himself in a state of uremia and acidosis. Trochar cystotomy seemed to be a necessity at the time. Several things might have happened as a result of that procedure because it was after that was done that the patient developed a septic course and became rapidly and progressively worse. It is very possible that the trochar may have punctured or otherwise damaged the peritoneum with some spillage from an old chronic infectious bladder into the peritoneal cavity. It's even possible, under these conditions, to puncture a bowel. Then too, if this patient had tuberculosis of the bladder, a trochar incision or even a surgical incision might produce disseminated miliary tuberculosis. I have seen two patients with tuberculous cystitis die within a short period of time following a so-called innocuous cystoscopy. In cases of this sort one doesn't expect to end up with a single diagnosis, but rather with a veritable museum of pathologic findings in the genito-urinary tract. There has been nothing here that would indicate that this man might have a malignancy. However, in patients with long-standing chronic infection, leukoplakia not infrequently develops and about 15 or 20 per cent of these develop into carcinoma. Long-standing pyonephrosis may also lead to cancer. We have no evidence to believe that this man had a malignancy;

however, if he did we won't be too surprised. Another possibility is that some malformation of the urinary tract may have been a causative factor in this man's obstructive disease. We know that approximately 8 per cent of patients have some malformation of the urinary tract, and we may find a horseshoe kidney or a polycystic kidney or some other anomaly in this case. I believe that the patient died of renal failure with overwhelming infection with these other possible complications that I have mentioned.

ANATOMIC DIAGNOSIS

DOCTOR HOPPS: I appreciate the limitations imposed on Dr. Dunn by this case. The history is admittedly inadequate, but we were limited by the data that the clinicians had recorded. Furthermore, since this case was at the University Hospital some years ago, neither Dr. Halpert nor I were here in the Department of Pathology, and we are unable to provide more material regarding the surgical pathologic report. I did review the surgical pathologic material, however. Of four sections, none included the epididymis. A granulomatous reaction was quite evident and its appearance was certainly suggestive of tuberculosis, although a positive diagnosis of tuberculosis could not have been made on that material. When the patient died, however, there was no question as to the presence of tuberculosis; that was the dominant feature of the case. Your comments on tuberculous foci in the genito-urinary tract as a source of spread of tuberculosis are very pertinent. I think that we should emphasize that in many adults, particularly males, hematogenous miliary tuberculosis or serious pulmonary tuberculosis may develop on the basis of a lesion in the genital tract. In reconstructing the sequence of events in this case it would be likely quite logical to assume that this patient had a tuberculous epididymitis and that this was the source of spread which was localized chiefly to the lungs. This patient's left lung weighed 1750 gm., which is approximately five times the normal weight. That means that the lung was almost completely consolidated. The apical portion contained a tuberculous cavity six and one-half by four by four cm. and there was tuberculous bronchitis and evidence of bronchogenic spread within the lung with large areas of tuberculous pneumonia here, in addition to discrete nodular tuberculosis. The right lung was rather similar, it weighed 1150 gm.; it did not contain a

cavity, but there again it was extensively involved in a tuberculous process, with tuberculous pneumonia and nodular tuberculosis. There were extensive fibrous pleural adhesions on the left side. Both pleural cavities contained a moderate amount of serous fluid, approximately 250 cc. in each instance. The heart was not particularly remarkable, nor were other thoracic organs. In the abdominal cavity most of the organs there were essentially normal save for the genito-urinary tract. The prostate was markedly enlarged, and at the time the autopsy was performed it was considered that there might be a malignant neoplasm represented. Numerous sections of the prostate showed only marked hyperplasia however, without any evidence of malignant change. The urinary bladder had a thickened wall and contained three diverticulæ, one of them quite large. The trochar cystotomy was directed into this large diverticulum.

I think that largely as a result of the chronic cystitis there was bilateral hydronephrosis. In all probability the marked hyperplasia of the prostate played some role too, but the degree of hydronephrosis was more than we usually see simply as an effect of prostatic hyperplasia. The right kidney, in addition to the hydronephrosis, presented a rather marked pyonephrosis, so that much of the fluid in the dilated calices and pelves was of creamy consistency and color. The left kidney was not markedly infected. In both instances, although the kidneys were of almost the normal weight, the parenchyma was markedly thinned and the cortex in no instance was greater than two mm. in thickness. This obviously represents a very great degree of renal damage, and this degree of damage must have occurred over a considerable period of time.

I won't go through the details of our final anatomic diagnosis because many of the features are of minor importance and do not contribute to the subject at hand. This man did have a marked pulmonary tuberculosis with cavitation, with bronchogenic dissemination within the lungs, and with tuberculous pneumonia and it seems that the degree of pulmonary tuberculosis would have been sufficient to cause his death. On the other hand, and apparently unrelated to that particular finding, is the marked prostatic hyperplasia which had caused so much difficulty and which had given rise to a chronic cystitis with obstruction to the ureteral orifices and a marked

degree of hydronephrosis and right pyonephrosis.

Although the man did have tuberculosis of the genito-urinary tract, and some small tubercles were seen in sections of kidney, the changes in the kidney were predominantly those of chronic interstitial nephritis — pyonephritis which was non-specific rather than tuberculous. The degree of damage to the kidneys also seems sufficient to explain this man's death. The third factor which is very important to all of this is the tuberculosis which was at one time localized in the epididymis. Of course it didn't begin there, it wasn't a primary infection, but it was probably the immediate source of the infection which spread to involve the lungs so extensively.

DISCUSSION

QUESTION: How did the tuberculous epididymitis develop?

DOCTOR HOPPS: Tuberculosis is virtually never primary in the genito-urinary tract, but what happens is this — an individual develops a primary tuberculous lesion, let us say in the lung, which leads to a slight degree of hematogenous dissemination in the nature of bacteremia rather than a septicemia. This leads to the establishment of one or a few metastatic foci here and there. There is no miliary tuberculosis — yet perhaps a single metastatic focus is set up which may flourish and which may at some later time provide a source for secondary spread.

QUESTION: Can you be sure that the genito-urinary tract was the source of the pulmonary tuberculosis?

DOCTOR HOPPS: Actually, in the final analysis, I think we would be unable to say with certainty which came first. It might have been that he had a progressive pulmonary tuberculosis at the time which spread to give this one focus in the epididymis. On the other hand, the reverse might have been true. I think Dr. Dunn and I have both emphasized the latter because of its greater teaching value, and because we should think of lesions in the genital tract as possible sources of widespread infection.

QUESTION: Suppose that the epididymitis had been recognized as tuberculous at the time?

DOCTOR DUNN: In tuberculosis in the genital tract, e.g. the seminal vesicles, prostate, or epididymis, the first thing to do is to rule out tuberculosis of the urinary tract. This is done by radiographic means, and also by

specimens taken from each kidney for culture, guinea pig inoculation, and stains. Then one might have opened the scrotum, as was done. If it was felt that the right testis was uninvolved, one could have done an epididymectomy and exteriorized the vas deferens on that side. That would have prevented the scar from breaking down re-

peatedly as it did. In view of the fact that there was a hydrocele on the opposite side, and also epididymitis, one might have done the same procedure there. If the testes were involved they would have been removed. Of course chest studies would have been done and the patient treated with bed rest, etc., for the disease tuberculosis.

ARE DOCTORS HUMAN?*

The compulsory health insurance plan of the Federal Security agency has caused much anguish among doctors.

Some are trying to fight the measure by giving money to a campaign fund. Others are doing their darndest in personal talks with their patients. And there have been threats and warnings issued.

Since the federal health plan probably will be extended to furnishing eye glasses, crutches, etc., it is reported that in one optical shop in Texas there is a sign:

"If you don't like standing in this line for your glasses, think what it will be like under socialized medicine."

Regardless of the outcome of the controversy over how this country can best go about making the largest number of people healthy, we think the arguments pro and con will do a whale of a lot of good.

Many doctors opposing a federal health plan, and they're not jerks but good substantial citizens, come crying with: "Why pick on us? We've got more patients than we can handle now. We treat the poor, free of charge. We charge high prices to the rich so we can spend our time and money on charity cases. We are the only ones who know what the practice of medicine involves and we shouldn't be restricted by anybody else.

"We aren't responsible for bad service in hospitals. It's not our fault the country is short of nurses. We're doing more than our share for humanity right now?"

There's a lot to some of these arguments. Many doctors in rural areas and a lot more in the cities work long hours and see a lot of patients. Some practice the highly technical specialties of their profession and do things for the human body that even their colleagues in other fields of medicine can't understand.

But we do believe doctors are human and not gods, a fact that some of them are beginning to forget in their demand that they keep exclusive control of all the rules in the game.

This oversight shows up in their relations with their patients. And, the patients are the ones who are going to tell Congress to vote Yes and No when the issue

comes up. As the doctors have pointed out, there are a lot more patients than doctors.

First off it won't do for the doctors to say they are just struggling along financially to make ends meet. Very few patients see any struggling young doctors. As a class physicians live in comfortable residences, drive substantial automobiles, dress well and travel.

Secondly the patients do, rightfully to a large degree, hold their physicians responsible for the services they get in hospitals and the nursing. They depend upon their doctor to see to it they get the service to which they are entitled, because he's the boss while they're sick.

Which brings us to the threshold of another point which we believe is the most important — the personal relationship between today's doctor and patient.

The old time "bedside manner" of the fatherly, sympathetic family physician is almost as extinct as the dodo. Home visits are rare. Visits to patients after they have been hospitalized are diminishing also.

And that blunt "scientific" manner now becoming almost universal caps the whole thing. Doctors tell you, "I don't care what you think your symptoms are. I've made my tests and I say this is what's the matter with you.

"This is what you have to do to get over it. I've done my job. Now you do yours and follow the prescribed treatment. If it doesn't turn out the way I told you it would, it's not my fault. I did my best and you don't know enough to criticize me."

On the basis of the discoveries made in psychology it can be argued this approach is just what the patient needs to get him well quicker. It'll save him money and perhaps cure him of hypochondria.

But it's very, very poor public relations.

And since the doctors believe compulsory health insurance will punish them for something that isn't their fault, we suggest as a friendly tip, the profession get close to the patient in the old-fashioned personal way, so that he will believe the doctor really cares something about him and his trouble.

Otherwise the patient might get the idea it would be a good thing if the government DID grab the doctor by the scruff of the neck and make him hold still for the patient.

*Reprinted from the Washington Times Herald March 24, 1949.

paroxysmal dyspnea...

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE



1. Murphy, F. D.: Treatment of Cardio-vascular Emergencies in the Home, Wisconsin M. J. 42:769 (Aug.) 1943

President's Page

No one should enter upon the duties of this office without a keen realization of the immediately critical situation surrounding American medicine now and its likelihood of continuing for some time.

The forces within and without governmental circles are making a desperate effort to force through Compulsory Health Insurance in the present session of the Congress.

Tragic as the result would be on the quality and kind of medical care if they were successful, it would not compare to the chaos which would envelop all of us on the rapidly accelerating road to totalitarian dictatorship.

Some groups of our citizens are awakening to this hazard as was evidenced by the recent action of the General Federation of Women's Clubs of America meeting in Florida in passing a resolution condemning ALL forms of Compulsory Health Insurance. This meeting represented some 5,000,000 American women.

It is imperative that the members of the medical profession put aside their minor differences and unite in a common effort now to inform the people of this country of the stark realities which face them. The Educational Campaign of the American Medical Association seems the most practical way of doing this effectively.

Your time and your various abilities will be greatly needed. Contribute generously of these and you will come to feel that you have been a vital part in a worthwhile cause.

We earnestly solicit your earnest thought on this most serious problem. Now is the time!

George H. Garrison
President.

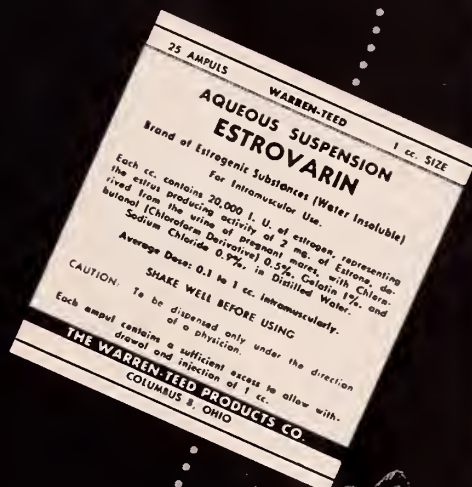
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PUBLIC RELATIONS REPORTER

HEALTH INSURANCE POLL

A Gallup coast-to-coast poll finds that the A.M.A.'s counter proposal for voluntary health insurance gets its greatest support in the midwest and south, and among the professional and white collar classes, and people living in small towns.

The Truman administration's compulsory health insurance program, according to Gallup, finds its greatest support in the eastern section of the U.S., and among manual workers and people living in big cities.

Results of the poll were 33 percent favoring compulsory health insurance, 47 percent favoring voluntary health insurance, 7 percent favoring neither, and 13 percent having no opinion.

It is significant that many of those interviewed were not familiar with the details of the proposed compulsory health insurance program, did not know that the sick, old and retired who have no regular job would not be enrolled under the government plan, and often did not know the meaning of the term socialized medicine. One person questioned said socialized medicine meant "medicine for social diseases." Also significant is the fact that many of the replies indicated a belief that the government's program would be free.

The lack of knowledge about what compulsory health insurance would mean, both among those who now indicate their approval of it and those who have as yet formed no opinion, outlines the tremendous job which lies ahead for the A.M.A. National Education Campaign and for every doctor of medicine.

MORE RESOLUTIONS NEEDED

This mail flooding into Washington is telling the lawmakers how the people feel as nothing short of a personal talk can. At the first tabulation, Oklahoma leads all other states in the number of such resolutions secured. However, this does not yet represent all County and District Medical Societies or more than a fraction of the state's civic and other organized clubs.

If your County Medical Society has not passed a resolution condemning compulsory health insurance as a dangerous measure which would lower the standard of medical care for the individual, create a great burden of additional taxes for all the people, and lay the foundation for a Social Welfare

State — do it immediately!

And present similar resolutions to the Resolutions Committees of other organizations to which you belong. Copies of suggested resolutions may be obtained by writing the Executive Office, 210 Plaza Court, Oklahoma City 3.

CALIFORNIANS WARNED

Speaking to a large group of California civic leaders under the auspices of the California Medical Association, Senator Allen Ellender, Louisiana Democrat, said "Compulsory health insurance will do violence to our way of life. It will destroy initiative, incentive, and freedom of action . . . that have given us the highest standard of living and the best medical care of any nation on earth.

"As a member of the Senate who has observed, at close quarters for 13 years, the inefficiencies of government administration, it requires no stretch of my imagination to picture the chaos and confusion, and the enormous administrative cost of a medical program conducted under political direction."

NEW ADMINISTRATION BILL

Introduction of the new administration bill for compulsory health insurance signals the beginning of an all-out drive by those who would like to see such legislation become law in the 81st Congress. There are indications that supporters of the measure are adopting several of the techniques which have gotten the A.M.A. National Education Campaign off to a flying start. One of these is the securing of resolutions against compulsory health insurance from organized groups of all types and mailing these and letters stating unalterable opposition to the proposal to President Truman and members of Congress.

REPORT FROM BRITAIN

Speaking recently to Arkansas Medical Society, Cecil Palmer, eminent British journalist, referred to Socialism and Communism as twins, saying "For 15 years, the people of Britain have been drinking the poison of Communism from the cup of Socialism."

Mr. Palmer said every instance of nationalization in a British industry has resulted in higher prices, reduced quality of production and reduced quantity.

A safe way of treating tinea pedis...

Use Sopronol, hundreds and hundreds of case histories suggest.

Sopronol is physiologic. It utilizes the fatty acids found in human sweat (propionates and caprylates) to combat fungi just as nature does.

And because of this, Sopronol heals effectively and safely. Is virtually non-irritating, non-sensitizing, non-keratolytic.

Fight fungi physiologically ... with Sopronol.

SOPRONOL[®]

IMPROVED

Propionate-Caprylate Compound



OINTMENT

| | |
|--|-------------|
| Sodium propionate | 12.3% |
| Propionic acid | 2.7% |
| Sodium caprylate | 10.0% |
| Zinc caprylate | 5.0% |
| Dioctyl sodium sulfosuccinate | 0.1% |
| Inert ingredients including n-Propyl Alcohol | 69.9% |
| | 10.0% |
| | 1 oz. tubes |

POWDER

| | |
|--------------------|-----------------------|
| Calcium propionate | 15.0% |
| Zinc propionate | 5.0% |
| Zinc caprylate | 5.0% |
| Inert ingredients | 75.0% |
| | 2 and 5 oz. canisters |

LIQUID

| | |
|--|---------------|
| Sodium propionate | 12.3% |
| Propionic acid | 2.7% |
| Sodium caprylate | 10.0% |
| Dioctyl sodium sulfosuccinate | 0.1% |
| Inert ingredients including n-Propyl Alcohol | 74.9% |
| | 12.5% |
| | 2 oz. bottles |

GENERAL NEWS

A.M.A. SESSION WILL FEATURE SPECIAL EXHIBITS — TELEVISION

More than 16,000 doctors are expected to attend the annual session of the American Medical Association, June 6-10, Atlantic City.

One of the outstanding contributions of the session will be a symposium on environmental hygiene, directed primarily to the subject of air pollution from smoke and "smog," concerned with possibility of relationship between cancer and inhalation of aromatic hydrogens.

Special arthritis exhibits will be unique and other scientific sections will include new meetings on allergy, diseases of the chest, and the history of medicine.

ATTENTION COUNTY SOCIETY OFFICERS

The fifth national Grass Roots Conference for county medical society secretaries will be held Sunday, June 5. The purpose of the Grass Roots Conference is to develop a working partnership between the American Medical Association and every physician. Panel topics include: "Is Your Society Prepared to Care for Emergency Calls?", "Does Your Society Have an Indigent Medical Care Plan?" and "Is Your Society Ready for the National Education Campaign?"

A program involving the use of television for teaching surgery will be unusual and television in four colors will be available to convention visitors in the Convention Hall. Use of television in making x-ray films clearer and sharper will also be illustrated.

The House of Delegates of the American Medical Association at the Atlantic City session will be concerned with current problems of great importance to American medicine and the coordinating committee which is in charge of the education program for the American people on medical care in the U. S. will report the progress of their activities, as will the special public relations counsel in charge of this work.

NORTHCUTT IS SPEAKER AT CONFERENCE

C. E. Northcutt, M.D., immediate past president of the Oklahoma State Medical Association, will address one section of the Conference of Presidents and other officers of state medical associations June 5 at Atlantic City.

Dr. Northcutt will speak on the problems facing the state association at the crossroads.

Discussion of compulsory health plans for medical care and for disability compensation, the A.M.A.'s relationship to the state societies and other topics of interest to the state association will be slated on the program which is open to all physicians.

POSTGRADUATE COURSE OPENS IN STATE JULY 18

Robert M. Becker, M.D., instructor for the postgraduate course in Internal Medicine, will begin teaching his first circuit the week of July 18 in northeastern Oklahoma.

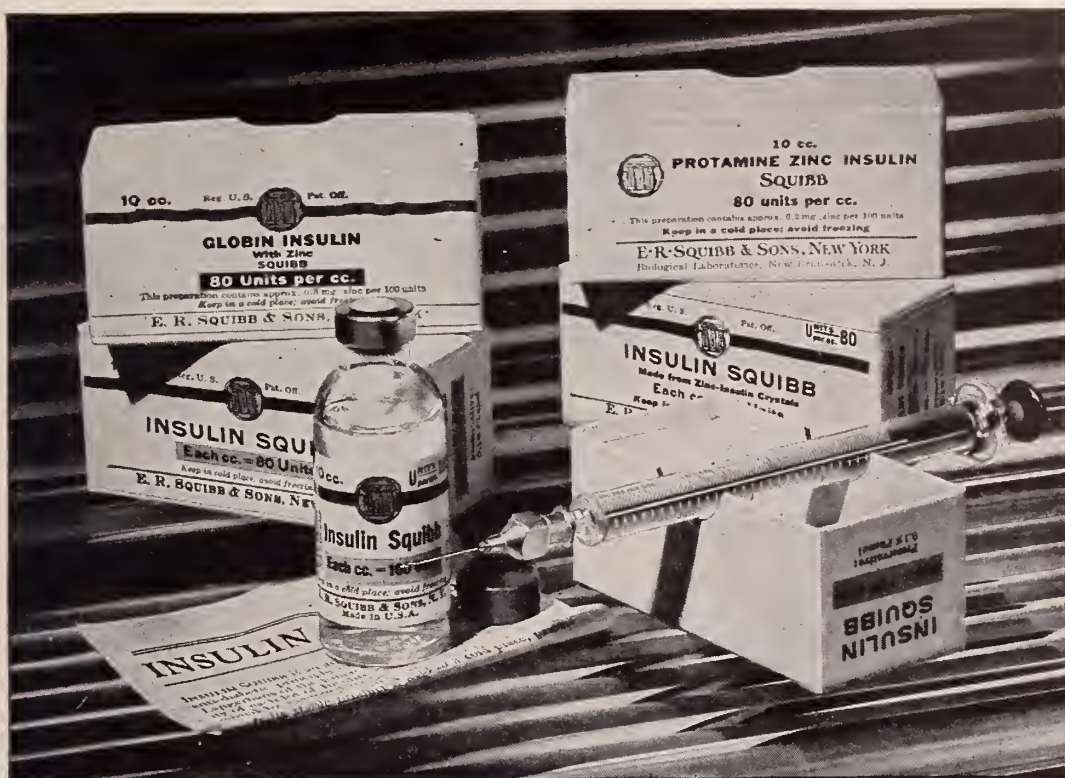


Dr. Becker

The counties included in this circuit are: Ottawa, Delaware, Craig, Mayes, Rogers, Nowata, Washington and Osage. The teaching centers will be Miami, Vinita, Claremore, Bartlesville and Pawhuska. Doctor Becker will give one lecture a week in each center for 10 weeks. He will discuss the following subjects:

- The Psychoneurosis and Differential Diagnosis of Common Symptom Complaints.
- Heart Disease and Electrocardiography.
- Renal-Vascular Diseases.
- The Anemias and Leukemias.
- Allergy and Hypersensitivity Diseases.
- Endocrinology.
- Gastro-Intestinal Diseases.
- Hepatic and Biliary Disorders.
- Preventive Medicine and Infectious Diseases.
- Antibiotics and Chemotherapy.

Announcement letters with the program and enrollment card have been mailed to all physicians in the first circuit. Physicians are urged to help save time and expense for the State Office by mailing the enrollment card promptly to the Postgraduate Committee, 210 Plaza Court, Oklahoma City.



SQUIBB INSULIN PRODUCTS

...purified...potent...rigidly standardized to meet the various requirements of diabetics.

short action: peak effect within 3 to 4 hours, waning rapidly

INSULIN SQUIBB

10-cc. vials (40, 80 & 100 units per cc.)

INSULIN MADE FROM ZINC-INSULIN
CRYSTALS SQUIBB

10-cc. vials (40 & 80 units per cc.)

intermediate action: peak effect in 8 to 12 hours, with action continuing
sometimes for 16 or more hours.

GLOBIN INSULIN WITH ZINC SQUIBB

10-cc. vials (40 & 80 units per cc.)

prolonged action: onset slow; peak effect in 10 to 12 hours, with action
sometimes persisting for 24 or more hours.

PROTAMINE ZINC INSULIN SQUIBB

10-cc. vials (40 & 80 units per cc.)

SQUIBB MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

CONSTRUCTION IS STARTED ON MEDICAL RESEARCH FOUNDATION

That More May Live Longer



a bid of \$790,350.

Actual construction on the building, which will be located adjacent to the University of Oklahoma School of Medicine on N.E. 13th Street, will begin within two weeks. The contractor has already announced that the building will be completed by June 1, 1950. "Awarding the contract," said W. T. Payne, Chairman of the Building Committee, "marks a long step toward the realization of a five year dream."

In 1944 the Research Foundation was an idea in the thinking of a small group of the alumni of the University of Oklahoma School of Medicine, sparked by the late Dean Tom Lowry. Then in 1945 the idea developed from the talking stage into a plan for a medical research foundation to be formed.

In 1946 the plan became an organization. The alumni of the Medical School provided funds for a survey of the state to determine the public's interest in supporting the foundation. The Oklahoma Medical Research Foundation was incorporated in May, 1946.

A fund raising campaign was begun in 1947, and to date a total of \$2,346,342 has been pledged toward the founding fund goal of \$3,000,000. The site on which the foundation will be built was donated by unanimous

The Oklahoma Medical Research Foundation awarded the contract April 19, 1949, for the construction of the main building. The J. J. Bollinger Construction Company, Oklahoma City, was awarded the contract for

action of the state legislature in 1947. The Variety Club of Oklahoma pledged \$600,000 toward construction of the building.

The doctors of medicine have pledged \$564,495, state dentists have pledged \$145,589, pharmacists \$131,990, the Medical Service Society \$5,000, nurses \$53,272, technologists \$5,670, and the general public \$1,440,325.

The main building will be three stories high, extending 225 feet on N.E. 13. One wing will be 128 feet deep, with the remainder of the building 48 feet deep. Before designing the building Coston and Frankfurt visited many of the outstanding research facilities in the nation in order to make the building strictly functional and utilitarian.

An editorial, which appeared on April 21, 1949 in the *Oklahoma City Times* under the heading "Great Things May Come From Here," stated:

"The letting of the contract for the main building of the Oklahoma Medical Research Foundation may eventually have worldwide significance, for it marks the tangible beginning of a project whose scope may affect the health of human being everywhere."

The editorial pointed out:

"Considerable research is already under way among Oklahoma physicians, as a side line. This will be greatly intensified, now that the research foundation is on its way. It may well be that some great new discoveries will be made here. Oklahoma will never have cause to regret its support of this institution. Persons of wealth who wish to confer lasting benefit upon humanity will find this a most promising object for philanthropic effort."

PRECEPTORSHIP PROGRAM BEGINS THIS MONTH

On June 20, 1949, the first group of senior medical students will begin work under the preceptorship program of the University of Oklahoma School of Medicine. This program, which is new to Oklahoma, is designed to offer the senior medical student an opportunity to observe general medical practice in smaller communities of Oklahoma. It is hoped that such experience will encourage the student to consider such a location when he enters practice.

The program was worked out jointly by the Alumni Association of the Medical School, the Oklahoma State Medical Association, and the faculty of the School of Medicine.

Under the program each senior medical student will spend a period of 11 weeks in one of the 18 towns in Oklahoma. The student will be under the supervision of a physician, and will observe and receive instruction in all phases of medical practice including office and home calls and hospital practice. The program will extend the senior year to 44 weeks instead of the present 32 weeks.

The supervising physician is called a preceptor and is a member of the General Faculty of the School of

Medicine. Appointments are made by the Board of Regents of the University of Oklahoma and are for a period of one year. The appointments began officially June 1, 1949.

On May 5, 1949, a luncheon for the preceptors and next year's senior class was held at the University Hospital in Oklahoma City. The aims of the preceptorship program were discussed and the preceptors met the students with whom they will work during the coming year.

The following is a list of preceptors for the year 1949-1950:

Joe L. Duer, M.D., Woodward; J. William Finch, M.D., Hobart; A. C. Little, M.D., Minco; Herbert A. Masters, M.D., Tahlequah; E. A. McGrew, M.D., Beaver; J. M. McMillian, M.D., Vinita; James F. McMurry, M.D., Sentinel; James S. Petty, M.D., Guthrie; V. W. Pryor, M.D., Holdenville; John R. Taylor, M.D., Kingfisher; C. A. Traverse, M.D., Alva; Roscoe Walker, M.D.; Pawhuska; A. J. Weedn, M.D., Duncan; L. R. Wilhite, M.D., Perkins; Henry D. Wolfe, M.D., Hngo; Earl M. Woodson, M.D., Potean; and J. F. York, M.D., Madill.

NEW ORGANIZATION MEETS IN STATE

The Association of Bone and Joint Surgeons, national orthopaedic society, recently organized, met in Oklahoma City April 1 and 2. A two day clinical program was provided at the Bone and Joint Hospital and at the Crippled Children's Hospital.

Officers elected were: Earl D. McBride, Oklahoma

City, president; Dnncean C. McKeever, M.D., Houston, vice-president; Garrett Pipkin, M.D., Kansas City, Mo., second vice-president; and Fritz Teal, M.D., Lincoln, Neb., secretary-treasurer.

Next year's meeting will be held at Lincoln, Nebraska.



Further evidence of the safety of 'Benzedrine' Sulfate therapy

More data, showing that 'Benzedrine' Sulfate, in proper dosage, produced no toxic effects, have lately been published in a study by Caveness.¹

He gave the drug for 14 consecutive weeks to 23 unselected hospital patients whose ages *averaged* 65 years. Daily dosages over the period ranged from 5 to 30 mg. The author observes:

"... no significant changes were noted in the cardiovascular, urinary, hematopoietic, or respiratory systems..."

From this study, it would appear that 'Benzedrine' Sulfate may be safely used in the treatment of depression in the aged.

1. New York State J. Med. 47:1003

Benzedrine* Sulfate tablets • elixir

(racemic amphetamine sulfate, S.K.F.)

*T.M. Reg. U.S. Pat. Off.



one of the fundamental drugs in medicine

Smith, Kline & French Laboratories, Philadelphia

O.S.M.A. MEMBER RECEIVES CITATION



Five outstanding Oklahomans have received distinguished service citation awards from the University of Oklahoma board of regents and the OU Alumni association. They are F. P. Baker, M.D., Talihina, superintendent of the state tuberculosis sanatorium; Lew Wentz, Ponca City; Bennie Owen, Norman, pioneer OU football coach; Miss Muriel Wright, Oklahoma City, author and historian, and Frank Phillips, Bartlesville. Left to right, are Dr. George L. Cross, OU president, who made the presentations; Dr. Baker, Miss Wright, Mr. Owen and Grady D. Harris, Alex, president of the OU alumni association. Mr. Wentz and Mr. Phillips were unable to attend the presentation, but were represented by friends, who received the citations.

ILLINOIS URGES RURAL PRACTICE

In an effort to turn young doctors of 1949 from the big city to the small town is a project of the Illinois State Medical Society.

Seventy-five young interns and residents were invited to Chicago as dinner guests of the Society to hear the story of a small town's advantages.

Three veteran small town doctors explained to them how to set up an office, to handle patients in home and office visits and to meet other problems of practice. A young doctor who recently set up practice in a country town told of his problems and how he solved them with the help of the neighbors. A small town banker explained how to find and finance their equipment, offices, homes and cars.

Descriptions of 40 Illinois rural areas which are in need of additional physicians were distributed with names and addresses of key persons to whom they could turn for information, advice and help.

A second list of 30 Illinois country doctors who want to retire soon and are looking for someone to take their places was also provided.

The Illinois Society, in collaboration with the Illinois Agricultural Association, a year ago established a \$100,000 joint student loan fund for students to pay for their education.

FIRE INSPECTION URGED FOR OKLAHOMA HOSPITALS

"The recent tragedy at St. Anthony's Hospital, Effingham, Illinois, has focused attention on a common deficiency among our hospitals, G. F. Mathews, state commissioner of health, pointed out in listing the basic principles of fire prevention and protection for hospitals.

Monthly fire inspections of hospitals by responsible members of the operating staff are urged by Dr. Mathews. He also recommends an annual inspection by the local fire marshal and strict compliance with all recommendations made by the marshal. In addition to protection offered, such regular inspections also serve to familiarize fire department personnel with the hospital buildings.

Important items to consider in hospital inspections are exits and fire escapes, heating equipment, kitchens, laundries, anaesthesia gas storage and use, open flame gas stoves, electrical systems, storage spaces and protective equipment.

Types of extinguishers for various hospital locations, as approved by the National Board of Fire Underwriters, were also included in the list which was mailed to all state hospitals by the State Department of Health.

"a summation of activity"

Council on Pharmacy and Chemistry, A.M.A.

J.A.M.A. 137:789 (June 26) 1948.

In Tincture Mercresin,* secondary amyltricrosols and orthohydroxyphenylmercuric chloride "supplement each other so that the mixture is approximately twice as germicidal for *Staphylococcus aureus* as the component cresol derivatives alone and seven to ten times as germicidal as the mercury compound alone."



Mercresin combines this germicidal potency with bacteriostatic and fungicidal properties for

1. antiseptics of superficial wounds or infections,
2. irrigation of certain body cavities and deep infected wounds,
3. topical application to mucous membranes, and
4. prophylactic surgical preparation of intact skin.

TINCTURE MERCRESIN

BRAND OF MERCOCRESOLS

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| Secondary-amyltricrosols | 1/10% |
| Orthohydroxyphenylmercuric Chloride..... | 1/10% |
| Acetone | 10% |
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(Tinted): 2 oz., 4 oz., pint, and gallon bottles

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Upjohn FINE PHARMACEUTICALS SINCE 1886

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BOOK REVIEWS

PSYCHODYNAMICS AND THE ALLERGIC PATIENT. Harold A. Abramson, M.D., with a panel discussion, 10 figures. St. Paul, Minn., The Bruce Publishing Company, 81 pages. Price \$2.50.

If a brief, concise presentation on the psychosomatic aspects of allergic disease is desired, there is no question but that this publication is the one of choice. In the limited space of 81 pages convincing psychodynamics are presented. It is not reading for the analyst, but an adequate enough working presentation that can be applied daily by the busy allergist or the private practitioner. The value of this book is further increased in that it is an official publication of The American College of Allergists. Its views represent not only the opinions of the author, but the panel discussions of five recognized psychiatrists, Drs. O. Spurgeon English, Frank Fremont-Smith, J. A. P. Millet, Sandor Rado and Edward Weiss. The discussions of a similar number of allergists are also incorporated in this volume.

The importance of this publication is that every effort is made to show that the allergic states are not purely psychogenic; numerous case presentations show that when psychogenic problems are corrected, a previously incorrect allergic state may come readily under management by the usual immunological methods.

The first chapter outlines the psychosomatic aspects of asthma and hay fever prior to 1900. Quotations of Hippocrates are presented. Authors of the 17th and 18th centuries are quoted in which they attributed attacks of asthma to situations engendering anger and other emotional responses.

The author then carries the subject through the mechanical era in medical thought initiated by Virchow and Pasteur and based upon the physical and chemical principles of immunology.

The last 67 pages of this book contain two publications by the author and the panel discussions of five psychiatrists and five allergists. The contribution of the psychiatrists here clearly indicates that psychiatry is not a threat to allergy but a promise of aid. They have adequately shown that the removal of a psychogenic factor interrupts the morbid chain of events in the allergic state the same as does the removal of an allergen or as is accomplished mechanically by hypsensitization.

The attitude of all of the allergists continues on a conservative or "middle of the road" policy. Dr. Rudolf L. Baer in his discussions of the allergic derma-

tosis adequately points out that a specific allergic eczematous contact dermatitis, due to dyes in stockings, cannot occur without a specific exposure. He goes on to show, however, that psychic factors can be contributing factors. Dr. M. Murray Peshkins' contribution includes the statement that allergists who are psychodynamically minded rarely see a major allergic condition initiated by a psychological disturbance. The discussion of Dr. Hal M. Davison emphasizes the point that no one has been able to show, up to the present time, that a psychiatric or a neurotic patient is more apt to become allergic than any other type of patient. The contributions of Drs. Homer E. Prince, J. Warrick Thomas and others emphasize the importance of a thorough allergy survey with the need of continuous search for psychogenic factors. When these are discovered they should be thoroughly pursued, and included in the investigation, an adequate psychiatric consultation.

The durable red board covering of the book is quite attractive. The binding is neat, the paper of fair stock and the illustrations clearly presented.

The book is recommended not only to all students of allergy and psychiatry but it definitely of value to all general practitioners.—George S. Bozalis, M.D.

ATLAS OF PERIPHERAL NERVE INJURIES. William R. Lyons, Ph.D., Associate Professor of Anatomy, University of California Medical School; Barnes Woodhall, M.D., Professor of Neurosurgery, Duke Medical School, Durham, North Carolina. W. B. Saunders Company, 1949.

This large atlas of peripheral nerve injuries is composed of some 400 large pages and is filled with photographs and microphotographs of the pathological changes that occur with peripheral nerve injuries and attempts to repair them. The accompanying text gives valuable interpretations and points out the cause of some of the failures of nerve regeneration.

This is one of the major medical contributions to be made from the material obtained during the last great war. It is by the understanding of the histopathological changes that occurred with such injury that our clinical knowledge regarding the repair of peripheral nerve injury is improved.

The book will be of extreme interest to all pathologists and the material it contains is necessary for the neurosurgeons to intelligently approach the problem of peripheral nerve injury.—Jess D. Herrmann, M.D.

OBITUARIES

F. W. BOADWAY, M.D. 1882-1949

F. W. Boadway, M.D., a practicing physician of Ardmore for the past 42 years, died April 17 following a heart attack suffered 10 days before while fishing at Lake Murray.

Dr. Boadway was born October 15, 1882 in Malone, N. Y. and came to Ardmore in November, 1907 after graduation from the medical school of the University of Kentucky, Louisville. He previously had attended Dartmouth and the University of Vermont and was a graduate of Kimbel college in New Hampshire.

Active in community and medical organizations, he held several offices in his county medical society and

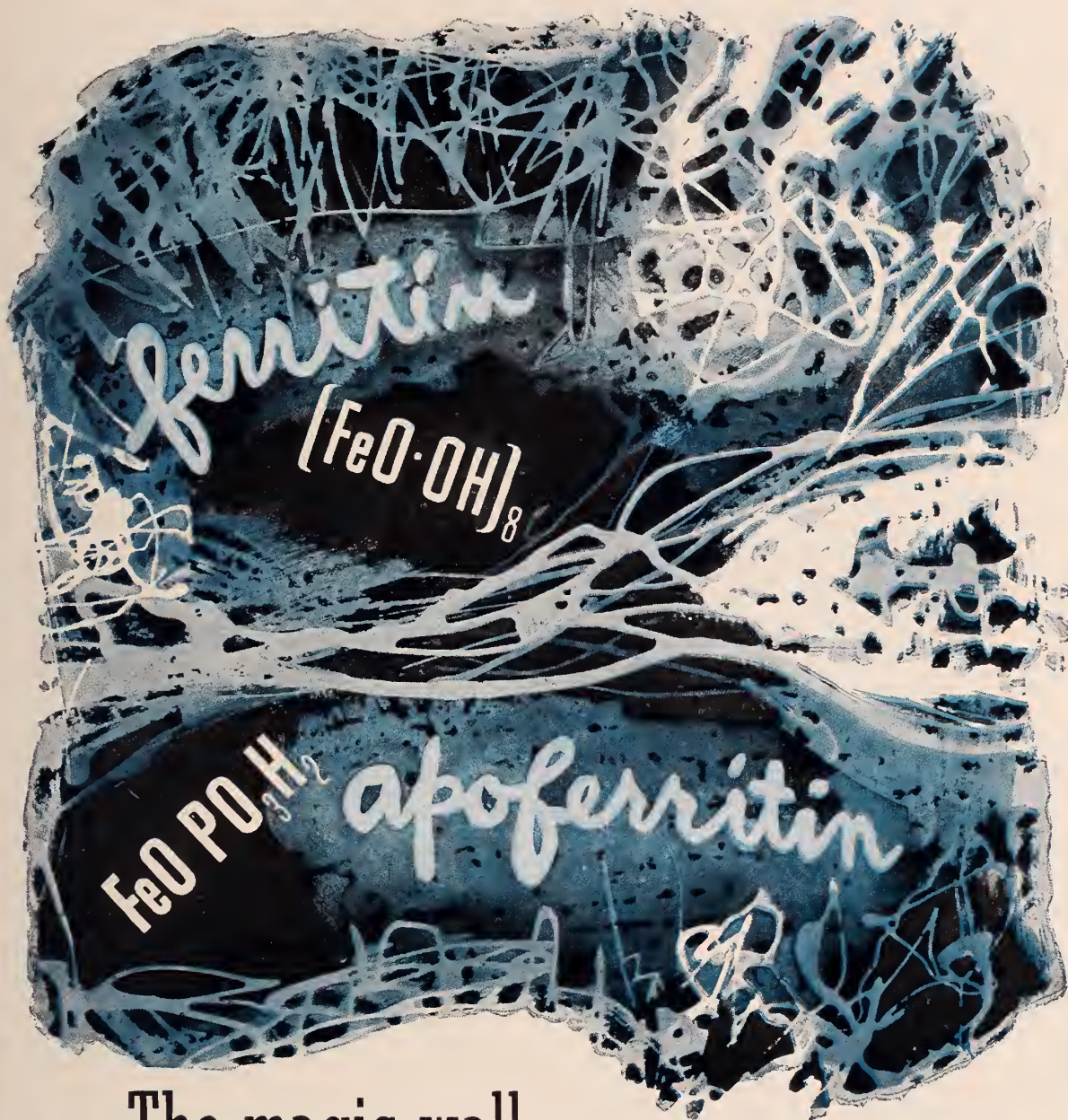
was to have been a delegate at the annual meeting in May.

Survivors include his widow of the home address, two daughters, two sons, one step-son, one brother and seven grandchildren.

GEORGE V. DORSHEIMER, M.D. 1875-1949

George V. Dorsheimer, M.D. of Dewey died March 16, 1949.

Dr. Dorsheimer was born October 22, 1875 and was graduated from the University of Missouri in 1913. He was a member of the Washington County Medical Society and was active in both county and state medical organizations.



The magic wall

Nowhere in the realm of biology exists so highly specialized and so biologically efficient a membrane as the mucosa of the human intestinal tract. Within this mucous membrane, about five millimeters thick, there take place the most intricate biochemical reactions designed to facilitate absorption of the products of digestion.

Research upon the fundamental aspects of hemopoiesis has gone forward steadily at Lederle for more than 20 years. Liver extract,

FOLVITE* Folic Acid, vitamins, combinations with ferrous iron, and such products of nutritional value in tissue repair as amino acids, have been made available as rapidly as they could be perfected.

Lederle research is proceeding actively in the field of the nutritional anemias, to the end that these almost completely preventable diseases may one day essentially disappear from daily clinical practice.

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HAVE YOU HEARD?

Mark D. Holcomb, M.D., Enid, was guest speaker at the Grant County Tuberculosis association's annual dinner meeting.

O. L. Parsons, M.D., Lawton, appeared on the program of the annual state meeting of the Indian Service Nurses association in Oklahoma City. Dr. Parsons spoke on the RH factor.

Harold Tisdal, M.D., has recently purchased the Clinton Clinic in that city.

J. T. Colwick, M.D., Durant, has 40 head of fine registered Herefords on his farm which his brother, Nob, run for him.

W. E. Jones, M.D., Seminole, is constructing a new clinic which will contain 12 rooms.

E. M. Gullatt, M.D., Ada, quoted the experience of Germany, New Zealand and England in his outline of compulsory health insurance before the Ada Kiwanis club.

Keith Oelschager, M.D., Yale, was named commissioner at large in a recent election.

Charles Green, M.D., Lawton, used "Mental Hygiene" as his topic before the Will Rogers P-TA in Lawton.

Bill Cotton, M.D. and *R. W. Lowrey, M.D.* have recently moved to Poteau and are constructing a new 14 room clinic which will have a staff of 10 including the two physicians.

Virginia Curtin, M.D., Watonga, was guest speaker at the Konawa Pioneer Study Club. Her topic was "It's All In A Day's Work."

F. R. First, Jr., M.D., Checotah, attended a two weeks postgraduate course in surgery in Chicago recently.

Ray Lindsey, M.D., Pauls Valley, spoke on "Socialized Medicine" at a meeting of the Pauls Valley Business and Professional Women's club.

M. L. Saddoris, M.D., Cleveland, was named to the board of education in his city.

Carl Bailey, M.D. has returned to Stroud where he will be associated with *Ross Demos, M.D.* Dr. Bailey has just finished a residency at St. Anthony's hospital in Oklahoma City and Benedictine Heights hospital in Guthrie.

John B. Gilbert, M.D., Ponca City, attended a two-week post graduate at Bellevue Hospital in New York.

H. K. Speed, M.D., Sayre, has been appointed chief of staff of the Sayre municipal hospital.

MEDICAL SCHOOL NOTES

The second annual Pre-Graduation Services for the graduating class of the School of Medicine were held on May 5, 1949 at the First Christian Church in Oklahoma City. This event is sponsored by the Alumni Association of the School of Medicine.

Dr. Alan Gregg, Director of the Rockefeller Foundation for Medical Research was the principal speaker. Dr. E. E. Talley, of Enid, Oklahoma, who is President of the Alumni Association, presided over the ceremonies and administered the Sponsio Academica to the 54 members of the Senior Class.

Dr. Arthur P. Stout, Associate Professor of Surgery

at Columbia University College of Physicians and Surgeons delivered two lectures at the School of Medicine on April 28, 1949. The subjects of the lectures were carcinoma of the stomach, and carcinoma of the breast. Dr. Stout's visit to the Medical School was arranged by the Committee on Cancer Teaching.

"Some Aspects of Alcoholism" was the subject of a lecture given at the School of Medicine on April 27, 1949 by Dr. H. W. Haggard, Assistant to the President of Yale University. Dr. Haggard is author of the book "Devils, Drugs and Doctors," and Director of the Laboratory of Applied Physiology of Yale University.

CLASSIFIED ADS

FOR SALE: 1 Admiral short wave with sub cabinet American walnut finish. 14 months old. \$250. Write Key H, Care of the Journal.

FOR SALE: Complete office equipment including: 1. Westinghouse pandex x-ray 100 M.A. shock proof. 2. Sound Scriber recorder and transcriber. 3. Hamilton walnut examing table and one steel table. 4. Two sterilizers and one diathermy. 5. Office and reception room

furniture. Will sell complete or separate. Write Key B, Care of the Journal.

FOR SALE: Nine room clinic with or without equipment. Located in one of the fastest growing cities of 20,000 population. A very good opening for internal medicine, a good man can gross twenty to thirty-five thousand per year. Don't apply unless you mean business. P. O. Box 357, Blytheville, Arkansas.

TULSA BLOOD BANK PROVING BOON

A total of 1,535 pints of blood were given by Tulsans during the first three months of operation to the Tulsa County Blood Bank center co-sponsored by the Red Cross and the Tulsa County Medical Society.

The center is trying to supply blood free of charge to local hospitals. All blood given through the center is free to recipients. There is a \$10 charge for laboratory work and for the actual administering of the transfusion.

In order to meet requirements of Tulsa hospitals (with a weekly minimum of 150 pints a week) the center must have 25 donors each weekday, according to Felix R. Park, chairman of the Blood Center committee.

FOREIGN MEDICAL GRADUATES' PROBLEM STUDIED

The Committee on Foreign Medical Credentials, an unofficial group sponsored by the American Medical Association Council on Medical Education and Hospitals, recommends that the various agencies concerned with problems of foreign trained doctors who seek to practice in the United States should devise a method for securing information about foreign medical schools at the earliest possible date. The recommendation was contained in a report in a recent issue of the J.A.M.A.

Membership of the committee includes individuals from the Advisory Board for Medical Specialities, the Association of American Medical Colleges, the A.M.A. Council on Medical Education and Hospitals, the Department of State, the Federation of State Medical Boards of the United States, the National Board of Medical Examiners, the Institute of Inter American Affairs, the Institute of International Education, the World Health Organization, the World Medical Association, and others.

When reliable information about foreign medical schools is obtained, it should be possible for accrediting agencies to prepare a list of foreign medical schools whose graduates may be considered to have received training comparable to that offered by medical schools in this country.

O.S.M.A. MEMBER ON ALABAMA PROGRAM

Gerald Rogers, M.D., Assistant Professor of Gynecology at the University of Oklahoma School of Medicine, was one of the guest speakers at the Alabama Association of Obstetricians and Gynecologists annual meeting April 18 at Montgomery.

Dr. Rogers' topics were "Management of Post Menopausal Bleeding" and "Surgical Complications of Pregnancy and Their Management."

HOW MUCH?

Cost estimates for a program of compulsory health insurance vary greatly. Britain's experience shows that estimates can be unreliable. There, socialized medicine has cost 40 percent more than expected in the first nine months, and expenses are due to rise for the next five to 10 years.

A BIG TIME-SAVER FOR EVERY DOCTOR



This handy booklet for new mothers was "built to doctors' orders". It contains blank forms for filling in your instructions and formulas.

It provides a permanent case-history record. A memo will bring you a sample...or as many as you want for your daily practice... without obligation.

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MEDICAL SOCIETIES AROUND THE STATE

Pottawatomie County

P. C. Gallaher, M.D., was chairman of the program committee when the Pottawatomie County Medical Society met April 20 for dinner in the Chinese room of the Aldridge Hotel. Dr. Gallaher's topic was "Traumatic Injuries of the Heart." L. D. Combs, M.D. led the discussion.

Tulsa County

"Cardiovascular Causes of Sudden Death — Its Prevention" was the topic of the scientific program when the Tulsa County Medical Society met April 25 at The Mayo. Felix R. Park, M.D., Tulsa, was speaker. H. Lee Farris, M.D., Tulsa, spoke on "Youth and Medicine" over Tulsa County's medical broadcast April 30. Station KOME carries the broadcasts which are heard each Saturday at 6:15 P.M.

Garfield County

The "Team" organization of physicians of the Garfield County Medical Society to cope with disaster had its initial tryout when the call for help came following the tornado at Canton and Longdale March 29. After picking up one of the disaster equipment sets, Team No. 5 composed of Mark D. Holcomb, M.D., John A. McIntyre, M.D., and A. F. Dougan, M.D., and Nurses Joyce Chowning, Peggy Sanders, Anna Belle Stephens and Oleeta Treadway answered the emergency call.

Stephens County

Local florists presented each doctor with boutonnières at the Stephens County Medical Society and Auxiliary dinner meeting on Doctor's Day. Several out of town guests were also invited to the meeting.

Kay County

Members of the Kay County Medical Society joined in a meeting at Wellington, Kansas of a tri-county medical group composed of Kay County, Oklahoma and Cowley and Sumner counties in Kansas recently. Preceding the scientific program and dinner, a golf tournament was held at the Wellington Country Club. Scientific programs speakers were Harry Wilkins, M.D. and Bert Keltz, M.D., both of Oklahoma City. Dr. Wilkins discussed "Headaches and Intractable Pains in General Practice," and Dr. Keltz' topic was "Present Day Management of Diabetic Mellitus."

Hughes County

The Hughes County Medical Society Auxiliary entertained members of the Society with a dinner at the home of Dr. and Mrs. Victor Pryor near Holdenville recently. Following the dinner, Clinton Gallaher, M.D., Shawnee, spoke on "Compulsory Health Insurance" and John Hart, associate executive secretary of O.S.M.A. also spoke briefly.

Cleveland County

The Cleveland County Medical Society announced its complete support of the Blue Cross community enrollment in progress in Norman under the auspices of the Business and Professional Womens club of that city.

Carter County

More than 95 per cent of the persons engaged in the medical profession in Ardmore have subscribed to membership in the chamber of commerce for 1949, according to J. Hoyle Carlock, M.D., membership drive chairman. Thirty of the 32 members of the Carter County Medical Society participated in the recent c. of c. drive.



Members of the Greer County Medical Society and the Auxiliary celebrate Doctor's Day with a buffet supper and costume party depicting the days of the pioneer horse and buggy doctor.

Pictured above are: seated, left to right, Dr. and Mrs. Leb Pearson, Mrs. E. M. Poer, Dr. Poer and Mrs. J. B. Hollis.

Standing, left to right; Dr. and Mrs. R. W. Lewis, Dr. and Mrs. David Fried, Mrs. D. D. Pierson, Mrs. Van Parmlee, Dr. D. D. Pierson, Dr. J. B. Hollis, Dr. Van Parmlee, Mrs. Fred Sellers, Dr. Sellers, Mrs. F. W. Coggins and Dr. Coggins.

Oklahoma County

Following a buffet supper at the Oklahoma Club, a recent Oklahoma County Medical Society's program included a discussion by John F. Burton, M.D., Oklahoma City, on the public relations program of the A.M.A. and the O.S.M.A. and the implications of the recommendation of the President to Congress on compulsory health insurance. The indoctrination committee of the Oklahoma County Medical Society sponsored its first program and discussion were led by L. J. Starry, M.D., Jess Herrmann, M.D. and R. Q. Goodwin, M.D. The Glee Club, composed of residents and interns, presented several numbers for the group.

Northwestern Counties

The Northwestern Counties Medical Society met recently as guests of the Community Hospital at Mooreland. Sixty Society and Auxiliary members enjoyed a dinner at the Legion Hut after which each organization had a separate business session. A resolution was adopted advocating the nomination of O. C. Newman, M.D. of Shattuck as president-elect for 1949-50. A resolution opposing the compulsory health insurance bill was also adopted and sent to President Truman. Two Oklahoma City physicians gave illustrated lectures for the scientific program. Cleve Beller, M.D., and Charles O'Leary, M.D. were the guest speakers with Dr. Beller's topic "Blood Dyscrasias," and Dr. O'Leary's, "Stomach Surgery."

Greer County

Members of the Greer County Medical Society and Auxiliary met March 30 at the Lewis Rx ranch house at Granite for a buffet supper in observance of Doctor's Day. The physicians and their wives were dressed in costumes depicting the days of the pioneer horse and buggy days.

ANNOUNCEMENTS

AMERICAN MEDICAL ASSOCIATION. June 6-10. Atlantic City, New Jersey. A.M.A. members (and that includes all O.S.M.A. members) who are not Fellows will be admitted to the general, scientific and other meetings, as well as to the exhibits. They may not take part in any of the official proceedings.

SOUTHWESTERN MEDICAL ASSOCIATION and the **NEW MEXICO DIVISION OF THE AMERICAN CANCER SOCIETY.** Joint meeting November 9, 10, 11, 12, 1949, Hilton Hotel, Albuquerque, New Mexico.

INTERNATIONAL POST-GRADUATE MEDICAL ASSEMBLY OF SOUTHWEST TEXAS. Annual meeting, January 24, 25, 26, 1950, Municipal Auditorium, San Antonio, Texas. C. F. Lehmann, President, John J. Hinchey, M.D., Secretary-Treasurer, San Antonio, Texas.

AMERICAN SOCIETY FOR THE STUDY OF STERILITY. Fifth Annual Conference. Hotel Strand, Atlantic City, New Jersey, June 6 and 7, 1949.

AMERICAN ASSOCIATION OF RAILWAY SURGEONS. Sixty first annual meeting, June 30 — July 2, Drake Hotel, Chicago, Ill.

ROCKY MOUNTAIN CANCER CONFERENCE. Third annual conference. July 14-15, Denver. No registration fee. For information and reservations write Cancer Conference, 519 17th St., Denver, Colo.

INTERNATIONAL ACADEMY OF PROCTOLOGY. First meeting will be held at the Malborough-Blenheim, Atlantic City, June 10, 1949. Further information and a copy of the program may be obtained by writing to Dr. Alfred J. Cantor, International Academy of Proctology, 43-55 Kissena Blvd., Flushing, New York.

NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS. Annual convention, Nov. 7, 8 and 9, 1949. Commodore Hotel, New York.

AMERICAN BOARD OF ORTHOPAEDIC SURGERY, Inc. Change in regulations is announced. Eligibility for examination, Part I: Beginning in the year 1952 the minimum requirements for eligibility for examination, Part I, shall consist of completion of an internship; a year of resident training in general surgery and two years of resident training in orthopaedic surgery on an approved service. Applicants filing in 1951 for examination, Part I, to be given in 1952 are subject to these minimum requirements.

GASTROENTEROLOGICAL ASSOCIATION. National Gastroenterological Association, in cooperation with the Postgraduate Division of Tufts College Medical School and the First and Second Surgical Services of the Boston City Hospital, announces a course in gastrointestinal surgery to be given at Boston City Hospital October 27, 28, 29, 1949. For further information and enrollment write to the National Gastroenterological Association, Dept. GSJ, 1819 Broadway, New York 23, New York.

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2. A LITTLE URINE



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WRITE FOR DESCRIPTIVE LITERATURE

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OFFICERS OF COUNTY SOCIETIES, 1949

| COUNTY | PRESIDENT | SECRETARY | MEETING TIME |
|---------------------------------------|---|----------------------------------|---------------------------------|
| Alfalfa..... | G. G. Harris, Helena | C. E. Cook, Jr., Cherokee | Last Tues. each Second Month |
| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | B. B. Coker, Durant | |
| Beckham..... | H. K. Speed, Sayre | E. S. Kilpatrick, Elk City | Second Tuesday |
| Blaine..... | W. F. Bohlman, Watonga | Virginia Curtin, Watonga | Third Thursday |
| Caddo..... | C. R. Waterbury, Apache | Edward T. Cook, Jr., Anadarko | Third Thursday |
| Canadian..... | J. N. Goldberger, El Reno | Jack W. Myers, El Reno | Subject to Call |
| Carter..... | Roger Reid, Ardmore | Royce Means, Ardmore | Second Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | R. K. McIntosh, Jr., Tahlequah | First Tuesday |
| Choctaw-McCurtain- Pushmataha..... | L. E. Gee, Broken Bow | H. D. Wolfe, Hugo | |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Fourth Thursday |
| Comanche..... | Walter Wicker, Lawton | Charles Green, Lawton | Second Tuesday |
| Cotton..... | A. B. Holstead, Temple | Mollie Seism, Walters | Third Friday |
| Craig..... | J. M. McMillan, Vinita | D. H. Olson, Vinita | |
| Creek..... | Frank H. Sisler, Jr., Bristow | Carl W. Bowie, Bristow | Second Tuesday |
| Custer..... | Floyd Simon, Clinton | J. H. Tisdal, Clinton | Third Thursday |
| Garfield..... | Byron J. Cordonier, Enid | Roscoe C. Baker, Enid | Fourth Thursday |
| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | Third Thursday |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Greer..... | Van S. Pamley, Mangum | J. B. Hollis, Mangum | |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | First Wednesday |
| Haskell..... | William S. Carson, Keota | C. M. Bloss, Holdenville | |
| Hughes..... | Imogene Mayfield, Holdenville | Ruth Annadowa, Holdenville | First Friday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Last Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Monday |
| Kay-Noble..... | D. M. Gordon, Ponca City | C. W. Arrendell, Ponca City | Second Thursday |
| Kingfisher..... | H. Violet Sturgeon, Hennessey | Henry C. Trzaska, Hennessey | |
| Kiowa-Washita..... | A. H. Bungardt, Cordell | Aubrey E. Stowers, Sentinel | |
| LeFlore..... | Charles Cunningham, Poteau | G. W. Hogaboom, Heavener | |
| Lincoln..... | U. E. Nickell, Davenport | Ross P. Demos, Stroud | First Wednesday |
| Logan..... | Webber Merrell, Guthrie | Phillips R. Fife, Guthrie | Third Tuesday |
| Mayes..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | Ralph Royster, Purcell | W. C. McCurdy, Jr., Purcell | |
| McIntosh..... | F. R. First, Jr., Checotah | W. A. Tolleson, Eufaula | Third Thursday |
| Muskogee-Sequoayah- Wagoner..... | L. S. McAlister, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
| Northwestern..... | R. G. Obermiller, Woodward | C. W. Tedrowe, Woodward | 2nd Thurs. Even Mo. |
| Okfuskee..... | A. S. Melton, Okemah | M. L. Whitney, Okemah | |
| Oklahoma..... | Onis George Hazel, Oklahoma City | Gerald Bednar, Oklahoma City | Fourth Tuesday |
| | | Mrs. Muriel Waller, Exec. Secty. | |
| Okmulgee..... | G. Y. McKinney, Henryetta | S. B. Leslie, Jr., Okmulgee | Second Monday |
| Osage..... | G. W. McDonald, Pawhuska | C. S. Stotts, Pawhuska | Third Thursday |
| Ottawa..... | Rex Graham, Miami | W. Jackson Sayles, Miami | Second Thursday |
| Payne-Pawnee..... | Howard Puckett, Stillwater | C. M. Rippy, Stillwater | Third Friday |
| Pittsburg..... | G. R. Booth, Wilburton | Homer C. Wheeler, McAlester | First Wednesday |
| Pontotoc-Murray..... | E. M. Gullatt, Ada | Ollie McBride, Ada | 1st and 3rd Wed. |
| Pottawatomie..... | J. N. Owens, Jr., Shawnee | F. C. Gallaher, Shawnee | Third Wednesday |
| Rogers..... | Roy Melinder, Claremore | P. S. Anderson, Claremore | |
| Seminole..... | J. D. McGovern, Wewoka | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Stephens..... | A. J. Weedn, Duncan | W. R. Cheatwood, Duncan | Third Wednesday |
| Texas..... | Glen A. Hopkins, Guymon | Ronald McCoy, Guymon | |
| Tillman..... | F. P. Fry, Frederick | O. G. Bacon, Frederick | Second and Fourth Monday |
| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | John G. Matt, Tulsa | |
| | | Mr. Jack Spears, Exec. Secty. | |
| Washington Nowata..... | Felix Adams, Nowata | C. L. Johnson, Jr., Bartlesville | Second Wednesday |
| Woods..... | John F. Simon, Alva | W. F. LaFon, Alva | Odd Months |

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

A HEALTHY SOUL

Marcus Aurelius, the best of Roman emperors, is reported as having said, "My pleasure consists in having a healthy soul . . . and in regarding with serenity everything that happens, accepting and using it in accordance with its worth." Today we are living much longer than men lived in the days of the great emperor but there is little evidence of improvement in our meditations. This question naturally arises, what are we doing with the extra time medical science has provided? Good health without good character, without honor and integrity may be worse than death.

Our government might do well to improve our environment to foster the growth of character, to pursue spiritual values rather than the annulling influence of socialized medicine, the obvious foe of the honor and integrity which springs spontaneously from liberty.

Let all physicians sing with William Ernest Henley, "I thank whatever gods may be for my unconquerable soul."

STATISTICS THAT DO NOT LIE

The December issue of the Statistical Bulletin of the Metropolitan Life Insurance Company discussed the population increase in the U.S. for the year, 1948.

As a result of a high birth rate and an all time low death rate plus immigration, the increase in population was 2,500,000. The birth rate during the past few years has outstripped our fondest anticipation. We quote the following significant figures and wonder what will happen to the world if other nations are matching our reproductive vigor:

"In the 8-year period 1941-1948, about 25,700,000 babies were born in our country, as compared with only 19,200,000 in 1931-1938. The total for the last 8 years thus is the greater by 6,500,000, or by one third."

Progress in the reduction of infant mortality will augment the increase in population. It is estimated that by the 1950 census we should have a total population of 150 million.

POTATOES IN POLITICS!

The politicians with potatoes in their paunches and in their portfolios didn't know what punches they were pulling when they put potatoes in politics.

Pulling \$2,000,000 annually out of the people's pockets to pay potato planters parity-plus pyramids the popular price, impoverishes the dinner pot and pauperizes the general population in favor of the potato plutocrats.

It requires 1,000,000 common people paying an income tax of \$200 to pacify the 28,444 potato planters. The downtrodden planters in Rhode Island unloaded enough potatoes on the taxpayers to average \$23,206 per grower. In Massachusetts \$12,229, in Maine \$9,825, in New York \$13,169 and so on down the line.

The wisdom of our government is beyond finding out.

Apparently having demonstrated their expertness in the handling of potatoes the bureaucrats are ready to take on the physicians. Compared to the cost of socialized medicine, everything else can be counted as small potatoes.

HONOR VS. WEALTH

It has been said that the general practice of medicine may be a hard road to wealth but it's an easy road to honor. Though Divine in origin it is a human business grounded in the flesh and it must ever retain the sympathetic touch with encompasses both soul and body.

The physician must be all things to his patient. Paré had this in mind when he said, "I did him the service of physician, surgeon, apothecary, and cook. I dressed him to the end of the case, and God cured him. And so I was well content with him and he with me."

The physician who preserves his honor goes to his couch content.

DEATH AND THE DOCTOR

How doctors live and what they die by is an intriguing subject. In the April 14 New England Medical Journal there is an editorial entitled "The Second Mile." Here is to be found a sensible discussion of the sensitive spiritual values found in the doctor's life. Here is expressed the sympathetic concern which causes him to travel the second mile where in the shadowland he learns that death is only a forgetting, a profound last sleep climaxing this lonely mile. Through this experience oft repeated he knows that the strain is in the anticipation and not in the final act of death and gradually through gracious living in the presence of death he learns how to die. Thus while coaxing his coronaries through continuous giving of mind and body day and night he eases the strain by accepting death as a merciful gift and thus maintains his tenure of life with the full fruition of his working years.

Those who doubt the logic of this train of thought should study the report of Dickinson and Welker "The Leading Causes of Death Among Physicians" in the J.A.M.A. April 23, 1949. After a careful analysis of available data, employing an unusual approach they conclude with this interesting paragraph:

"It therefore seems safe to say that only accidents play the role of an important younger cause of death among physicians and its importance is considerable in terms of working years lost; heart disease still constitutes a serious portion of the death problem for physicians; the physicians are alert to early recognition of their own symptoms of cancer; and the average age at death of physicians is not greater than that of the general population when adjusted for the differences in age and sex distributions. Although the causes of death are different for physicians, the net effect on length of life is negligible. The medical profession is apparently giving to the general population at least as much and at least as good medical care as it is giving itself."

While the last sentence is to be considered a generous gesture it falls far short of the whole truth. The medical profession is giving much better medical care than it receives. Often the physician neglects his own health in behalf of his patient but in spite of this he is able to run with the crowd to the end. This remarkable ability, in the face of high incidence of cardiovascular episodes, is no doubt due to his compassionate yet placid pursuit of a commendable life with death as a gracious goal.

N - O - T - I - C - E

INTERNAL MEDICINE

Postgraduate Course Begins July 18

Robert M. Becker, M.D., Instructor

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Oklahoma City, N-O-W!

Teaching centers, Times and Clinic Chairmen are:

Claremore, Mon., July 18, 8 p.m., U. S. Indian Hosp., R. C. Meloy, M.D.
Vinita, Tues., July 19, 7:30 p.m., Library, E. O. H., D. H. Olson, M.D.
Miami, Wed., July 20, 7:30 p.m., Miami Baptist Hosp., L. P. Hetherington M.D.
Pawhuska, Thurs., July 21, 7:30 p.m., 312 Bk. of Com. Bldg., Wm. A. Loy, M.D.
Bartlesville, Fri., July 22, Memorial Hospital, F. C. Lawrence, M.D.

DON'T DELAY

ENROLL TODAY

SCIENTIFIC ARTICLES

MEDICAL ASPECTS OF ATOMIC ENERGY*

EDWIN G. WILLIAMS, M.D.**

WASHINGTON, D. C.

The thing we now call atomic energy is not new. We are fortunate in having had some 50 years of "pilot plant" experience between the discoveries of x-ray and radioactivity, and the startling announcement that mass could be converted into energy under controlled conditions. Various types of radiations are associated with this conversion. I shall confine my remarks to those waves and particles traveling with sufficient energy to produce ionization in tissue.

X- and gamma rays are electromagnetic disturbances traveling with the speed of light. X-rays may be thought of as being man-made whereas gamma rays are spontaneously emitted from the nucleus of the atom. Alpha and beta radiations also come from the nucleus. The present tendency is to think of them, not as rays, but as high speed particles. Neutrons may be produced by "machines" but also are associated with the phenomenon of nuclear fission.

From a medical standpoint one naturally thinks of:

1. *Clinical Radiology.* We have come to feel that radiation damage resulting from the clinical use of x-rays and radium has been relegated to the dim dark past and affected only the pioneers. In 1941, however, Scheele and Cowie made a study of 45 hospitals in 24 states and found some rather surprising facts: Fourteen of the hospitals were without radium loading protective device. In 10 others the device was constructed of lead less than two inches thick. Special instruments for the handling of radium were lacking or inadequate in 25 instances. Obsolete equipment and failure to provide or use protective barriers permitted many

cases of overexposure. The casual finding of 12 radiation injuries among 60 radiologists was reported. Recent reports indicate that leukemia is nine times more prevalent among radiologists than physicians as a whole, and that the life expectancy of radiologists is reduced by five years.

Artificially produced radioactive isotopes have now been added to the armamentarium of the physician. He must determine which ones to use and to what extent they may be useful in the diagnosis and treatment of disease.

One recalls the work of Low-Beer showing that certain cancer tissue will selectively concentrate phosphorus. If radioactive phosphorus is given and the cancer is near the skin it can be detected and localized by such instruments as the Geiger-Meuler counter. Clinical studies in as widely separated points as Georgia, California and New York are adding to our understanding of vascular disease. The treatment of choice of polycythemia vera seems at the moment to be internal radiation by means of p^{32} . Radioactive iodine is of diagnostic and therapeutic usefulness in thyroid disease.

2. *Research.* Possibly the greatest benefit to man that will result from the achievements of the Manhattan District will be derived indirectly through fundamental and applied research. Already we are making more rapid progress because of the use of isotopes in human physiology and biochemistry in normal and abnormal states. By tracer techniques we are studying the toxicology of many noxious substances, and by using the toxicologic approach we are understanding better the harmful effects of radioactive substances. Since many substances are detoxified by the liver and excreted by the kidneys, these two organs are under close scrutiny for untoward effects from

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1949.

**Chief, Radiological Health Unit, Public Health Service, Federal Security Agency.

diagnostic or therapeutic doses of substances containing radioactive elements.

It is impossible to do good work with radioisotopes in clinical application or biological investigation without the formation at the working level of a team, the minimum requirements for which are: 1. a physician qualified in the human application of isotopes (or a non-clinical counterpart if the work is not on humans), 2. an individual qualified in nuclear physics with at least a fair understanding of radiobiology, 3. a biochemist with experience in handling radioactive isotopes. It is the rare individual, if indeed he exists, who has enough proficiency in all of these fields to enable him to pursue a "lone-wolf" research approach using these new tools. There should be someone, preferably not a member of the research team, responsible for the safe handling of and proper disposition of the radioactive materials.

3. *Industrial Uses Including Power.* Protective measures in using atomic energy are similar in principle to those necessary in other applications. X- and gamma rays are used in the testing of many industrial processes. Elimination of static in paper and textile mills is another industrial use of radiation. In such settings the protection of the worker is simple in principle and should be rigidly enforced in practice. A technically more difficult situation presents itself in the radioactive luminous dial painting industry. However, as a result of the tragedies in this field which came to light several years after exposure, safety rules have been adopted and workable and presumably safe tolerance levels have been established. An almost endless recitation of specific uses of radiation and radioactive substances with potential hazard could be given.

Differentiation between hazardous and non-hazardous conditions must often be arbitrary. If we must err, the error should be on the side of safety. Our knowledge of the public health aspects of high energy radiation is so meager that laws passed at this time might prove inoperable or soon seem naive. It would seem wiser for the present to rely on expert technical advice, statements of guiding principles and operating codes.

If we accept the statement, and I think we may, that all radiation effects are dam-

aging effects, the only tenable philosophy is *Avoid All Avoidable Radiation*. Any amount of radiation can be worked with safely if proper precautions are taken. No amount of radiation can be worked with safely if proper precautions are not taken. We must embark on an educational rather than a "scare" program. We must give facts to develop a healthy public attitude which will create a respect for rather than a fear of peace-time uses of atomic energy and prevent panic in case of disaster.

Monitoring methods and specific instrumentation will vary with the installation or procedure. But no one should be required or permitted to work with ionizing radiations or radioactive substances in the absence of acceptable and properly operated personnel monitoring. Each unit must assume responsibility for the protection of its staff and all other personnel who may be or may become exposed as a result of the activities of the unit. In the interest of uniformity and intelligent deviation from uniformity advisory and coordinating bodies could be highly useful. These bodies could also translate new knowledge and developments into public information and integrated activities.

With regard to "atomic" accident or disaster it would seem that there are two problems differing only in magnitude and complexity. Experimental or industrial accidents will likely result in not more than a few casualties. Hospitals and "relief stations" should have the knowledge and equipment necessary to give these people the best possible care and treatment, and to properly dispose of contaminated articles. Military use would probably involve large numbers of casualties and may disrupt many of the operational activities of the community. Education and training of medical and ancillary personnel in the special knowledge and techniques involved and a general educational program for the public are essential. Any disaster plan must be a comprehensive one for the community and the radiation or "atomic energy" aspects of it must become an integral part of the whole. Such a plan must be sufficiently flexible to mesh with similar plans of other communities and with a nation-wide plan as one develops.

PSYCHOGENIC ASPECTS OF ALLERGY

JOHNNY A. BLUE, M.D.

OKLAHOMA CITY, OKLAHOMA

Some aspects of medicine, like styles, seem to run in cycles. Prior to the era of bacteriology, the theories of the nervous origin of diseases were frequent in vogue. Medicine as a whole is now in a "psychosomatic" whirl,¹ and allergy is drawn into the maelstrom with many other diseases; for example, rheumatism.¹⁰ As we approach the hobbleskirt in extremes, then perhaps we will revert to normal again in allergy as in styles.

Patients with long standing allergies naturally go through a nervous strain and the seeming endlessness of some allergic conditions stretch this very near to the breaking point. But is this a pattern of allergy or is it a characteristic of all diseases?

Several years ago we were led to believe that allergic individuals were far above the intelligent quotient and that they were highly strung and that allergy was never found in the insane. All of this was pleasing to the allergic patient. Now we know this is not altogether true.

Is this psychiatric manifestation of many diseases a new born babe of the science of medicine, or is it just the "new look" so to speak? The Greeks learned centuries ago from the barbarian Tracians² that the body could not be cured without the mind, thus psychosomatic medicine is nothing new, but is centuries old.

Allergy, being a comparatively new specialty, caught the public fancy some years ago and as a result became the waste basket for most of the undiagnosable conditions. In this interval another infant of the medical specialties has become of age so to speak, namely, psychosomatic medicine. Thus, the allergist in sorting out the material from the catch-all waste basket, has begun to toss some of them toward the psychiatric field where a few rightly belong, but are prevented from being sorted into that branch of medicine by an unpar-

donable pride. Some have adopted the psychosomatic concepts in order to escape therapeutic failures.

Psychosomatic medicine may be looked at from three different viewpoints.³ First is that in which signs and symptoms in somatic organs are seen to accompany specific mental diseases (dementia præcox, manic depressive psychosis, etc.) Second, psychosomatic medicine suggests that specific somatic diseases are influenced by mental states (peptic ulcer), thirdly, that repeated emotional or psychologic stress may actually produce certain diseases such as asthma, essential hypertension, eczematoid dermatitis. This is the least established of the three concepts but the most discussed recently.

This paper is not concerned with the first, but will dwell some on the second and particularly on the third viewpoints and case reports will be offered to illustrate these points.

Sulzberger⁴ has stated that he has never seen urticaria produced by psychogenic factors alone. Some doctors and a few patients recognize that the pleasing sensation that patients suffering with pruritis both in acute and chronic skin conditions by rubbing and scratching is closely related to some form of masturbation. This phenomenon possibly could be classed under the second heading mentioned above.

The following two case reports may also come under a similar heading.

This 39-year-old white female had suffered with perennial allergic rhinitis for 20 years and perennial asthma for 10 years. She had also experienced intermittent attacks of atopic dermatitis since infancy, but this had become very much aggravated recently. She gave a past history of headaches. She had been married for 12 years and had three children but her home life had been unhappy. In this interim, extra marital sex-

ual relations had given her complete relief for four years. When these relations ceased her allergic manifestations returned. She worked and on arriving home, when her husband was there, it immediately precipitated her attacks. Such foods as tomatoes, dried beans, lettuce, pork, watermelon, milk, cabbage, pepper, condiments, pastries, onions and coca cola were incriminated as precipitating factors along with dust, house dust, lint from clothing, damp weather and cosmetics. Skin tests showed strong reactions to most of these foods and inhalants. There was a strong family history of allergy.

Another patient, a 26-year-old female had a strong allergic background. Her maternal grandmother had severe asthma, her father had migraine headaches, her mother had severe sinus trouble, one sister had a skin rash from eating certain foods and one brother had headaches.

The patient had hay fever for two years, in the spring, while living in Texas. She also had asthma when nine years old, but no other allergic symptoms except headache, nausea and vomiting.

She did not like milk, bananas, malt, peppermint, alcoholic beverages, onions, garlic or pork and thought that these foods would produce headaches, nausea and vomiting. Other precipitating factors were onset of menses, rich foods and emotional upsets.

She had been the runt of the family, having been a premature baby, and later contracting diphtheria, scarlatina and corea. She had been chided and teased by the other children all of her life about her scrubbiness, puniness and ugliness. Her father had psychic vomiting and headaches and always developed these symptoms on week-ends when he remained at home, but had little trouble while working. This patient often accompanied her father on hikes, fishing and hunting trips on weekends, the both of them vomiting as they went along. The IQ of the entire family was high and they were all very industrious and devoted. The patient made good grades in college and developed athletic prowess. She married a man of less intellect because he was the only male who ever showed any love for her. He forced her to quit college as a junior, which worried her some. Her husband did not like to dance and refused to learn. He provided her with the material things but she did not feel as proud of him as she wanted to. The first four years she was frigid and intercourse was painful. She later overcame

this through consul with a physician. However, she continued to have severe headaches and vomiting, particularly on week-ends and when they planned to attend any social function.

She remained childless but had a burning desire for children and had numerous tests for sterility. She punished herself mentally because she thought she was to blame even though the tests were negative. Eventually she found that her husband was sterile. Following this she became attached to another man and her headaches became less severe. Most of the time they could be relieved by the administration of octin. She was markedly sensitive to morphine and became deathly ill upon taking it. Once she had extramarital relations with this man her headaches became milder and less frequent and were completely relieved by such intercourse.

The word allergy is defined as the study of the reactions of living cells to their environment and to the alterations in their environment. Some investigations have found a low hydrochloric acid secretion in allergic disorders. Nervousness increases *Bacillus Welchii* which in turn produces histamine like substances. Could this be an explanation of some of the so-called psychogenic factors of allergy?

The following case report may throw some light on this. It possibly illustrates the third viewpoint mentioned above.

This 44-year-old German immigrant, who had become a naturalized citizen, had been apprehensive about his immediate family who had remained in Germany during World War II. He had no allergic background and had experienced no symptoms of allergy until July, 1946, at which time he thought he had a cold. This was manifested by watery eyes, sneezing, nasal secretion and obstruction. During this time he was having considerable trouble with a fellow worker who had repeatedly threatened to whip him. During this time his nasal condition became worse and he began to have violent attacks of asthma. These attacks continued until he made up his mind to fight the above challenger, which he did and won. His asthma ceased but he continued to have some symptoms of allergic rhinitis and hay fever. Allergic survey showed strong reactions to several foods and inhalants common to the area where he resides. He became asymptomatic on elimination diet and hyposensitization.

The "Psychic" plays a prominent role on the stage of all human ailments. Pain and discomfort are just what the patients make them. To many individuals, illness is an escape mechanism. This was recognized as a reality by most medical men in the armed forces^{5 6 13} who dealt with large groups of men under forced regimentation and abnormal living conditions and who at times were exposed to real warfare and death. Many of these cases which came under the classification of allergy and who had marked headaches resembling migraine, noses of allergic rhinitis which were literally dripping, marked bronchial asthmatic coughs and wheezing, urticaria and angio edema, showed considerable improvement in their symptoms when they were placed on the "evacuation list".⁷ Thus, a ticket home, an escape from reality and the discomforts of military life, alleviated their symptoms in a similar way that symptoms of patients in the past have been relieved by an unruffled sympathetic family doctor who employed a few kind words of encouragement and administered a simple drug or poultice.

This is analogous to the asthmatic child who becomes asymptomatic by a sojourn to Arizona or points west. Is he escaping some material precipitating factor in his home or school environment, such as inhalants, or some psychic factor such as a dominating father or an exacting school teacher?

It may also fit in with the emotional reactions of the little girl who stated that the only time her mother petted her and did not spank her was when she had asthma.

Many allergic children are over wanted or under wanted and are thus overprotected and coddled because of their weakness and illness, or are neglected and shunned. This should be detected by observation and the history, and serves as a clue in evaluating suggestive therapy in management of the case.

With 10 per cent of the population said to manifest some major form of allergy it stands to reason that a certain per cent of these will come under the category of psychiatric disorder. However, it is my opinion that allergic patients who deny conflict, give misleading explanations, fear personality study, practice vagueness and evasiveness and sabotage treatment, all of which are psychosomatic traits, are in the minority. "There are no convincing reports in the literature of any allergic condition having received any more relief from psychiatric

treatment than should have otherwise occurred from wise counseling from the allergist."⁸

All doctors have observed the temporary improvement of patients after the change to another physician has been made. This improvement in the patient is often psychic in origin. This is analogous to many allergists finding it difficult to read skin tests of common foods such as milk, eggs, cereals, etc., as negative, being aware somehow of good results in other cases where these foods were eliminated from the diet and also having witnessed innumerable times the relief expressed by the patient that something had been found materially that is responsible for the symptoms.

Medicine and magic have been bed fellows since the beginning. Even the laymen detects this by looking at the symbol of medicine, the staff and serpent Aesculapius. Such primitive emotions have nurtured quackery.

We often fail to get on the other side of the fence and take a look from the patient's viewpoint. "The doctor is the embodiment of the nursing and protecting mother and the controlling, regulating, rewarding and punishing father. His white coat and equipment are suggestive of this magic, however we as physicians need to turn such primitive emotions away from mysticism and combine knowledge, paternalism and maternalism in such a manner that 'the art of medicine becomes a science'".¹⁶

Katz¹⁵ has emphasized the fact that the automatic nervous regulation of the heart rate, blood pressure and many metabolic functions are under control of centers located in the hypothalamus and that this can produce arrhythmias by psyche stimulation.

Most doctors have seen amenorrhea in women who had a profound desire to be pregnant or a mortal fear of being pregnant. Such emotional halts of menstruation are explained by Reifstein⁹ as a derangement of the functional mechanism by suppression of hypothalamic influence on the anterior pituitary gland by the psychic insult.

The following case report may shed some light on what effect the central nervous system has on bronchial asthma. It may also bring to light the influence of the pituitary gland on such conditions since electrical shock therapy undoubtedly markedly stimulates this gland or insults it in some manner.

This 51-year-old white female had a fam-

ily history of allergy and some nasal obstruction when young and had her turbinates removed but had experienced no allergic symptoms until the fall of 1946, at which time her favorite sister died. At about this time she became ill, developed asthmatic symptoms and her menses ceased and she had other symptoms of the climacteric, lost a lot of weight and continued to go down hill physically. She consulted numerous allergists over this part of the country with no benefit. She was seen by me Jan. 1, 1947. She weighed less than 80 pounds, was very weak and in status asthmaticus. She gave a history of onions, chocolate, eggs, weeds, grasses, house dust, cat and dog dander, change in weather, cosmetics and emotional upsets as aggravating her symptoms. She was found sensitive to the above things by skin tests and also several other foods including milk. She responded to allergy management and supportive therapy and gained 50 pounds of weight in nine months. Another death occurred in the family and her allergy symptoms increased. She became prone to overdose herself with adrenalin, aminophylline and many drugs used for allergy. Then out of a clear sky she went into marked status asthmaticus and showed no response to all the modern methods of therapy. After consultations with the psychiatrist, electric shock therapy was decided upon. She responded miraculously and became asymptomatic after several treatments. Her condition was classed as an obsessive compulsive neurosis which some psychiatrists say many asthmatics have.

The above case possible comes under the third phase listed above. It may also well illustrate what Rackemann¹⁴ terms "depletion in asthma" which he explains as depletion of both body and soul.

Many psychiatrists have regarded coincidences as proved casual relationship in regard to allergy. In my way of thinking it is very difficult for me to accept Wilson's belief that hay fever is the result of inadequately, repressed olfactory sexual impulses, French's expression of an asthmatic wheeze being a stifled cry precipitated by an external situation which threatened loss of security relative to a mother figure; Miller's explanation of rosacea as symbolic expression of shame, or Saul's idea that "hay fever and allergy in general and colds are manifestations of suffered intensification and frustrations of passive receptive wishes with a strong oral component."⁴ Fromm-Reichmann's conclusion is that migraine is

caused by repressed hostility toward loved ones in which the patient during childhood was frustrated in intellectual rivalry with a sibling or siblings. The head is selected as the site of pain because of frustration of the "intellect" in the child by the parent.

The skin is one of the leading organs of emotional expression surpassed only by the voice and the facial muscles. Such manifestations as pallor and sweating of anxiety, blushing of self consciousness, heart jumping in throat,¹¹ butterflies in the stomach, no guts or too much¹² frozen with fear, blind with rage, green with envy, spitting cotton, are examples of nervous or psychic influence on the soma and are well known and detected by the layman. Fear, anger, love, hate, nervousness, irritability, anxiety and emotional upsets all have their outward expressions. If such reactions and influence play a part in the normal reaction of the body to emotional strain, then it stands to reason that nervous strain and emotions may also affect allergic conditions by aggravating, exaggerating and even precipitating them. The condition then becomes twofold.

Vaughn's citation of an asthmatic who was sensitive to roses having had a violent attack on smelling an artificial rose has become a classic in psychosomatic explanation of allergy. Is this any different from the shyness of man or horse from a noise resembling the rattle of a rattlesnake, when they have had adverse experiences with such reptiles before?

We should manage these patient's psychoneuroses along with their allergy. An element of preistness, ministry, teaching, and friendliness should be combined with psychiatry and medical management in handling such cases, not psychoanalysis.

Perhaps it would be more simple to class the management of many psychiatric aspects of allergy and medicine in general under the heading of the art of medicine, which today is rapidly becoming a lost art, and revert to the tactics of the erstwhile family doctor, instead of the modern, cold, calculating, ultra scientific specialists of today. This family doctor of the past had only a few drugs and laboratory facilities and did not know what certification was. He did have a broad knowledge of human nature, family background and that rare ability of instilling the utmost confidence when he walked into the room, removed his hat and coat and opened the black bag filled with many colored bottles and pills.

I doubt that any of the psychic suggestive phases will cure an allergic patient. They are merely one phase in the medical armamentarium of managing diseases in general.

CONCLUSION AND SUMMARY

1. Allergic patients with neurotic tendencies should be managed by the allergist and not a psychiatrist because the condition is generally twofold and the allergist should have a better insight of the patient as a whole.

2. There should be a closer physician-patient relationship in managing allergic conditions. Chain-line mass production management of such patients is conducive to the development of psychogenic factors.

3. There is a large psychogenic factor to be dealt with in the management of allergic conditions, but it probably does not greatly surpass many other diseases and as the veil of mysticism is further lifted and the science of allergy pulls further away from the faddist's waste basket stage of medicine, this psychiatric trend will probably decrease.

4. There are psychotic patients with allergic manifestations but they are in a very small minority.

5. It is doubtful that the psyche alone ever produces true allergic symptoms. There must be an underlying allergy, either active or dormant, which becomes aroused and aggravated by nervous stress and strain.

6. We should strive further to make the art of medicine a science.

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CHRONIC ESSENTIAL PENTOSURIA

A REPORT OF THREE CASES

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The term melituria is properly employed to indicate the presence in the urine of an abnormal amount of any sugar. Since not all meliturias represent glycosuria, the identification of the sugar may be a matter of importance. Some of the more rare meliturias are lactosuria, galactosuria, maltosuria, mannoheptulosuria, pentosuria, fructosuria, and sucrosuria. All too often patients with such benign conditions are thought incorrectly to have diabetes mellitus and are treated for such.

Chronic essential pentosuria is a rare, benign, inborn error of metabolism characterized by the more or less constant presence in the urine of small quantities of pentose.¹ It is asymptomatic and harmless, bearing no relation to diabetes mellitus, and

the utilization of other carbohydrates is unimpaired. All reported cases have been in members of the Jewish race and particularly in males.² The studies of Lasker³ leave no doubt that pentosuria is inherited as a Mendelian recessive trait. Most of the reported families of pentosurics living in the New York area have come from eastern Europe. Marble⁴ has recently reported nine patients with pentosuria among 29,000 patients with melituria. Its chief importance lies in the possibility of mistaking it for glycosuria. Pentosuria is characterized by the following reactions:

1. It reduces Benedict's solution at room temperature over a period of a few hours.
2. It is not fermented by yeast.

3. It gives a positive Bial test.
4. It gives a negative Seliwanoff test.
5. It forms a characteristic pentozone with phenylhydrazine.

We have recently seen three patients, a father and two sons, in whom chronic essential pentosuria was demonstrated. In each case a fasting urine specimen gave a positive reaction to a qualitative Benedict's test, reduced Benedict's solution within two hours at room temperature, was not fermented by yeast, gave a negative Seliwanoff test, and a positive Bial test.

REPORT OF CASES

Case No. 1. S. S., a 45-year-old Jewish male, married and with three sons, had been under observation for melituria for the past 20 years. For 12 years he had followed a diabetic diet. In 1939 a glucose tolerance test gave normal results and since that time the fasting blood sugar had been determined periodically; all were within normal limits. Melituria had been consistently present. The patient's parents had originally resided in the Ukraine.

Case No. 2. A.S., a 17-year-old Jewish male, the oldest son of S.S., had been under observation for "renal glycosuria" since

1939. A glucose tolerance test and several fasting blood sugars had been normal. Melituria had been consistently present.

Case No. 3. D.S., a 14-year-old Jewish male, another son of S.S., had been under observation for "renal glycosuria" since 1939. Two fasting blood sugars had been normal. Melituria had been consistently present.

COMMENT

As is true in many such cases, the father had been under treatment for diabetes mellitus for several years in the past. Only after demonstration of the normal glucose tolerance test was this abandoned, but thereafter all three patients had been considered to have "renal glycosuria" and had been studied periodically for the presence of potential diabetes mellitus. These cases demonstrate the fallacy involved in considering all cases of melituria to be glycosuria.

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Appreciation is expressed to Miss Margie Thompson, M.T. (A.S.C.P.), who performed the laboratory work involved in these case studies.

TWENTY-FIVE YEARS AGO

(From Our Early Files of Editorial Notes—Personal and General)

Dr. J. T. Phelps, and wife, El Reno, visited Chicago last month.

Dr. and Mrs. J. T. Riley, El Reno, attended the A.M.A. meeting at Chicago.

Dr. and Mrs. J. F. Renegar and children are motor-ing to Tennessee on a vacation trip.

Dr. Shade D. Neely, Muskogee, has been appointed Roentgenologist for the U. S. Veterans Hospital No. 90, at Muskogee.

Dr. C. A. Johnson, Wilson, is a candidate for the office of Department Commander for Oklahoma, of the American Legion.

Dr. Leila Andrews, Oklahoma City, left last month to spend the summer abroad.

Dr. C. Doler, Sentinel, is moving to Foss, where he has entered into partnership with Dr. E. F. Stephens.

Dr. J. B. Clark, Coalgate, is taking post graduate

work during June at Washington U. and the St. Louis clinics.

Dr. O. C. Newman, Shattuck, recently performed thirty tonsil and adenoid operations at the County Clinic at Shattuck.

Dr. G. I. Walker, Hominy, is taking a postgraduate course at the Mayo's at Rochester, and a three weeks' course at the Chicago clinics.

Dr. Charles W. Tedrowe, Woodward, has been selected as Grand Commander, at the annual conclave of the Knights Templar, succeeding Clark Tucker, of Pawhuska.

Dr. and Mrs. W. M. Gallaher, Shawnee, were hosts recently at a picnic for the local members of the profession, making the close of the society's meetings for the summer.

The Medical Arts Building, Oklahoma City, now in process of construction, has been almost fully rented, according to Dr. John S. Pine, chairman of the stockholders committee, and it is contemplated to add another story to the building.

REPORT OF THE SIXTEENTH ANNUAL MEETING OF THE AMERICAN ACADEMY OF ORTHOPEDIC SURGEONS IN CHICAGO

PORT JOHNSON, M.D.

MUSKOGEE, OKLAHOMA

The presentation of new material to a group of specialists is a different problem from presenting the same material to a group of general practitioners. Their experience with similar medical material and the background of similar problems has conditioned the specialist to a more rapid and ready assimilation of new ideas in his own field. This means that an idea which can be presented in half an hour to a group of specialists might require a long preliminary course of study and orientation before it would have a maximum significance to the less specialized physician. This is not only true in orthopaedics, but in all fields. Personally, I do not recognize the language of the ophthalmologist or the cardiologist. Consequently, I feel that rather than try to present to you in half an hour what I have learned in a week, I will pick out a few of the more basic trends in orthopaedic thought and practice as presented at this Orthopaedic Academy meeting, particularly as related to the general science and practice of medicine.

Every orthopaedic patient is, or at least should be, the patient of a general practitioner or a pediatrician before becoming a patient of an orthopaedist. There are two groups of patients which should be referred to the orthopaedist or to any specialist for that matter. These are those in which the specialist can assist in clarifying the diagnosis, prognosis and indications for treatment because of his special experience or methods. The other is made up of those cases for which the specialist has some specialized form of treatment which is not

available to the general practitioner because of his limitations either in training, experience, or material aids.

It follows that the general practitioner should know a good deal about each specialty in order to use the specialist for the maximum good of his patients. He must learn to look for and recognize the signs of silent or asymptomatic pathology in infancy and childhood which will lead to disability in adult life if not recognized early. He must learn what the specialist is capable of accomplishing so that he will not tell his patient that nothing can be done when there is actually available an effective method of relief for his complaints. The general practitioner always loses a patient by telling him that there is nothing that can be done. These patients will look elsewhere for help. Many go to the cultists or the big clinics. I get them sometimes but their treatment is never as satisfactory as though they had been referred directly. The skepticism and uncertainty produced by the difference of opinion as to the usefulness of treatment makes them less willing to accept treatment, makes them more easily discouraged by their progress and the delay in instituting treatment often jeopardizes the end result.

There is a definite recent trend among medical men to recognize their obligation as educators and their responsibilities to the public at large as well as to their own patients. Most of the essayists and exhibitors at this Orthopaedic Academy meeting hinted at, or openly stressed, the need for education of the profession in general in orthopaedic principles and methods so that case

finding and indicated treatment will be earlier and more complete, and free from the demoralizing confusion and uncertainty which goes with exposure to differing opinions.

This is particularly true in children, where variations in growth patterns produce such asymptomatic, but later disabling conditions as club foot, flat foot, displasia of the hip with subluxation or real dislocation, dorsal round back, scoliosis, etc. All of these conditions were discussed at length in the meeting and all have several things in common. They are not fixed entities like a fracture, but are variations from normal which may be great or slight. They all get worse unless treated. Their progression is based upon physiological principles laid down by Heuter, Volkmann, and Wolff many years ago. They all can be cured by the simple application of these same principles to the treatment. A simple expression of the general method of treatment is, "As the twig is bent, so grows the tree." In other words if a joint is held during a period of growth continuously or predominately in such a position that the compression forces exerted on different areas of the joint surface are unequal, then there will be an inequality of growth which will tend to equalize the compression force when the joint is in this assumed fixed position.

Upon this principle of controlling or influencing the rate of growth at joint surfaces, is based practically all of the orthopædics of childhood. It should be well understood by all physicians because it not only points the way to successful treatment of many congenital and developmental deformities but also explains, and shows how to prevent the deformities which follow poliomyelitis, Erb's obstetrical palsy, and postural defects.

Most of these conditions do not become painful or show other seriously disabling symptoms until after growth has stopped, and yet the success of treatment is absolutely dependent upon the increment of bone growth during and following treatment. Without exception, these defects tend to become worse without treatment and become more disabling in adult life than they were in childhood. The advice to wait and see or the opinion that the child will outgrow the trouble is false and unsound advice when applied to foot deformities, hip subluxations, obstetrical palsy, polio residuals and spinal curvatures. These must be treated. I

do not mean to imply that some radical method is to be used in all cases. In fact, the vast majority, if treated early enough, will respond quickly to some simple posture controlling device such as shoe modification, a splint to be worn at night, an abduction splint for hip displasia, an abduction splint for Erb's palsy, exercises and postural advice for spinal deviations.

Bow legs, knock knees, or flexion or extension deformities may require a differential growth arrest of an epiphysis by placing staples across the epiphysis on the convexity of the deformity. Fusion of an epiphysis may be required by unequal leg length. Occasionally, surgery is needed to correct gross deformities by osteotomy, or to produce stabilization by arthrodesis, or to re-establish muscle balance by tendon transplants.

The mechanical details of such treatment and the timing of such treatment constitute the skill of orthopædic surgery in childhood. The cases must be recognized early. It must be realized that in general the earlier the treatment, the more effective; and waiting for the child to outgrow a defect is an untenable line of approach.

The following statements were made in reference to different conditions by various orthopædists speaking to this meeting. "Every new-born child should be carefully examined for minor foot deformities." "Every time a child under one year of age is examined, the hips should be inspected for asymmetry in the gluteal, thigh, and the groin folds and the hips tested for range of abduction." These signs indicate a dislocation or subluxation of the hips. "Every child seen under 15 years of age should have his back inspected while standing in the nude." This will disclose scoliosis, pelvic tilt, or dorsal round back. "Every examination of every child should include an inspection of the bare feet while standing." At least we should look at the bottoms of the shoes to see if they are being worn evenly, as an inequality in the wear of the shoe will be an indication of deformity or imbalance in childhood. "Feet deserve much more attention from the profession at large and from the orthopædist in particular than they have received in the past."

In the adult orthopædic field, a wide acceptance of intramedullary nailing of fractures, particularly of fractures of the shaft of the femur was about the only new technical development of importance.

Several series of cases in which bone grafts have been used were reported and bone banks are becoming increasingly more common and more useful. The old question as to whether a bone graft ever lives or only acts as a scaffolding and a local source of needed building materials has not as yet been settled.

Interest in fractured hips and un-united fractures of the femoral neck seems to have waned, as there is almost universal agreement that these fractures should all be treated by open reduction and internal fixation. A vast majority of the non-unions about the neck of the femur can be rehabilitated by safe surgical methods and there are only minor differences in the methods of treatment in different orthopaedic centers.

The low back and disc question is receiving less attention as there is increasing agreement as to the indications for conservative and surgical treatment and only minor technical differences in surgical procedures. The discovery of a high percentage of late recurrences of disability following simple excision of a disc without a spine fusion, is restricting the indications for that simpler operation, while simplified successful techniques for low spine fusion have largely eliminated the old objections to this operation.

In the field of fundamental basic research, Doctor Eggers of Galveston reported a very important study on the influence of bone contact and compression on the rate, quality, and completeness of fracture healing. Roughly, he has demonstrated in experimental animals that absolute immobilization without contact of bone fragments tends to prevent union; that moderate compression between fracture surfaces such as might be produced by muscle tone and skin and fascia elasticity, greatly favors union; but that more powerful compression through such apparatus as the Rodger-Anderson splints, will produce a necrosis and a fragmentation of the fracture surfaces.

This work goes far to explain the frequent non-unions and delayed unions which follow open reduction with plate fixation, multiple pin fixation by the Stader or Roger-Anderson apparatus, and following fixation of fractures of the neck of the femur by the Lorenze screw type of apparatus, and following over-pull in traction, particularly in fractures of the shaft of the humerus or metacarpals. It also explains the sclerosis,

disorganization, and non-union which occasionally follows too early weight bearing in a walking cast. It argues for the use of the loosely applied slotted plate or intramedullary fixation of fractures with early partial activity but prolonged protection from full-weight bearing.

Clinical experience has led to these same conclusions, but it is important to have this experimental confirmation of clinical impressions as such experimental confirmation is much more acceptable to the profession at large as a guide for methods of treatment, than the unsupported empirical conclusions of the experts which have been derived from clinical experience alone, and rightly so.

Orthopaedic surgery is coming of age. Because of inherent mechanical and physiological difficulties, the technical development of orthopaedic methods has been slow and tedious, but is, I believe basically complete. There will be simplifications and modifications and extensions of the present methods of treatment but really new and different developments will wait on new discoveries in the basic sciences and new modalities. There are still many things to be learned, but that which is known is fairly well understood and agreed upon. The differences of opinion are not about basic concepts but about minor technical methods. This year, for the first time in my experience, the annual meeting of the American Academy of Orthopaedic Surgeons produced no heated or basic arguments on fundamental concepts among the experts.

This academy has been facetiously referred to as a local of the carpenters' union. This group this year was in no sense a meeting of bone carpenters. It was a meeting of physicians in the true sense of the word, concerned with the responsibilities to their patients, to their potential patients, to organized medicine, and to the public at large. The orthopaedist is no longer asking general practitioners to add their patient to his series of cases for clinical experimentation, but he is asking them to find and refer those patients for whom orthopaedics has a definite, proven and agreed upon plan for the prevention and treatment of deformity and disability.

Compared with some of the other specialties, real maturity and usefulness in orthopaedics may have been slow, and many of you have of necessity gotten along without our help.

The most important thing about going away to a medical meeting is the opportunity and inspiration to review one's own work and one's service to the community and the causes for the community's failure to accept this service more fully.

Looking back from that distance and with that inspiration and perspective, I am most impressed by one group of patients. They are those whom I have well pleased and well served who had been previously told that nothing could be done for them. During the past year these have included many foot disabilities and deformities, a bilateral congenital dislocation of the hip, an un-united fracture of the femoral neck, a recurrent dislocation of the shoulder, an old fracture

of the talus with secondary post traumatic arthritis of the ankle, an osteoarthritis of the knee, a cervical rib with nerve and vascular pressure, several polios, cerebral palsies, arthritics, and backaches of all kinds and degrees. I am sure that for every one that I have seen, many have gone to osteopaths, chiropractors, Indian doctors, etc.

I have attempted in a few minutes to indicate some of the fields in which orthopaedic surgery can help you to render good medical care. I have also tried to indicate the fields of thought and research in which orthopaedic specialists are now concerned and interested, as indicated by the material presented at the recent meeting of the American Academy of Orthopaedic Surgeons.

DOCTOR'S IDEA MAKES SENSE*

BY EDITH JOHNSON

If every state medical association would follow the sensible example of Oklahoma's State Medical society that has voted to set up a committee composed of five past presidents to listen to the people's grievances President Truman's compulsory health insurance program in all likelihood would lose considerable support.

Too long have the doctors and their patients postponed sitting down together and talking things over as a means to achieving a better mutual understanding of the problems on one side and on the other.

Doctors know already what are the public's major complaints, the difficulty of getting care in the home and the cost of medical services, and of the two the former seems to give rise to the greater dissatisfaction.

People should take advantage of any opportunity to speak up at the invitation of the doctors. Just as a majority of physicians and surgeons are opposed to the president's program or any other program that would savor of "state medicine" so millions of laymen and women take a similar position. Many in both groups fear that in the event of the president's program becoming law it would be a curtain raiser for the passage of another act, one socializing medicine similar to the health act of Britain which went into effect July 5, 1948.

Forerunner of "state medicine" in Britain was the compulsory insurance act of 1911, a measure that covered the majority of employed men and women — it did not cover members of their families. If that could happen there, why should it not happen here? —

Many who are critical of the medical profession as a whole are still thinking in terms of treatment by a horse-and-buggy doctor in this advanced age of the air. They remember that the horse and buggy doctor of their childhood (he may or may not have had three or four years' schooling, and no internship) responded to a call and arrived with a bag containing a few instruments and a supply of medicines; that without the aid of a laboratory he made his diagnosis and that frequently was guess-work, measured out a few pills or rolled up a few powders, offered his advice and went his way. A good doctor he was according to his lights, but incidentally the death-rate was much higher in those days than it is now.

In sharp contrast to the methods used by the horse-and-buggy doctor the modern physician uses many laboratory techniques his grandfather in the profession did not dream of. He may use these techniques in his own offices or he may rely upon a hospital or commercial laboratory. Consequently, the cost of diagnosis and treatment has doubled, or trebled or quadrupled for many a doctor and certainly for his patients, a condition that too many of us lay folk have not understood.

Although a series of surveys of public opinion show fairly large percentages of persons who say they would supply free medical care for people of limited income, the cost to be borne by government they report that for their own they have sought and paid for good care whatever the cost. If all doctor's books were open it is certain that not a few would show accounts unpaid regardless of a doctor's being unable to afford free services.

Proponents of the Truman program claim that hundreds of thousands sicken and die for want of proper care. Whether or not their figures are accurate there is a great deal of sickness that the best of doctors could not heal because of conditions over which they have no control; cases of hyperchondria, of physical illness caused by psychic factors, poor housing and persistent abuse of a patient's health due to ignorance or carelessness or hostility to the profession, to malnutrition, sometimes due to poverty, but oftener to carelessness or ignorance.

Since they have been invited to do so let the laity file their complaints, or in the words of the marriage ceremony, "hereafter forever hold their peace." Let both sides sit down together and with goodwill discuss their problems including larger facilities for the training of more doctors, more and better hospitals, more doctors for the rural areas and some kind of subsidy to provide adequate care for people in the low income brackets who should not be deprived of it because of their inability to pay.

Let the people study the history of state medicine, past and present. Let them take plenty of time in order to gather information about it. Far better investigate carefully before making their will known to their representatives in congress. Better be safe than sorry.

*Reprinted from *The Daily Oklahoman* May 17, 1949.

CLINICAL PATHOLOGIC CONFERENCE

*Presented by the Department of Pathology and the Department of Surgery
The University of Oklahoma School of Medicine*

BÉLA HALPERT, M.D., AND EDWARD M. FARRIS, M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HALPERT: Unless a disease produces characteristic signs and symptoms, and those are correctly observed and interpreted, no adequate clinical diagnosis is possible. The case to be discussed today offers such a problem. Dr. Farris will present and analyze the clinical data.

CLINICAL DATA

Patient: W. M., a 15-year-old white girl, was admitted to the University of Oklahoma Hospitals December 29, 1947, and died January 13, 1948.

Chief Complaint: Vomiting and abdominal discomfort.

Present Illness: In June, 1947, the patient became acutely ill with nausea and vomiting, cramping and protracted pain in the left lower quadrant of the abdomen, and fever. Magnesium sulphate administered by the mother gave little or no relief. The abdominal pain became generalized, followed by some localization in the right lower quadrant of the abdomen. Her physician diagnosed appendicitis, but no operation was performed. Pain later developed in the upper right thorax. On July 24 the patient was admitted to the Indian Hospital in Talihina. She was given several courses of penicillin, sulfadiazine, sulfaguanidine, and a course of streptomycin without appreciable influence on her temperature which was of septic type throughout, averaging 103° F. at its peak. On October 15 tenderness and enlargement of the liver were noted, and a palpable tender mass deep in the umbilicus. A diagnosis was made of subdiaphragmatic abscess and intraperitoneal abscess. The mass beneath the umbilicus rapidly became larger and pointed, and on October 21 an incision was made for a distance of about 5 cm. into the abscess cavity, with drainage of 25 cc. of thick, white pus. Cultures of the pus

showed Gram-positive diplococci predominating, with few Gram-negative diplococci and bacilli. The abdominal abscess closed slowly with very little drainage by December 1. Meanwhile the pain in the upper right thorax had entirely disappeared. Roentgenographic studies showed cloudiness in the right costophrenic angle with lack of mobility of the diaphragm. Further operation was refused by the parents and the patient was removed from the hospital against advice on December 2. She was brought to this hospital December 29, 1947.

Physical Examination: At the time of admission there was slight bilateral exophthalmos. The sclerae, corneae, and conjunctivae were clear. The tympanic membranes and auditory canals were as usual. The heart was not enlarged to percussion. There was a systolic murmur heard best over the pulmonary area, and not radiating. Lungs were normal to auscultation and percussion. The abdomen was scaphoid. There was a draining, unhealed incision 1 cm. in diameter in the midline halfway between the umbilicus and the symphysis pubis. There was generalized tenderness with hyperperistalsis and peristaltic rushes. On rectal examination a hard, smooth, shelflike mass, tender and not movable, could be felt in the cul-de-sac. Deep and superficial reflexes were not remarkable.

Laboratory Data: On December 30 the urine was yellow, clear, with a pH of 7.5, and specific gravity 1.003. The red blood cell count was 3,110,000; the hemoglobin content was 5.5 Gm.; the white blood cell count was 18,600 with neutrophiles 88 (stabs 9), lymphocytes 11, and monocytes one per cent. The red blood cell count and hemoglobin content rose steadily for the next ten days. On January 12 the red blood

cell count was 4,431,000; the blood contained hemoglobin 11 Gm.; the white blood cell count was 19,200 with neutrophils 85 (stabs 3), lymphocytes 14, and monocytes one per cent. The total protein content of the blood was 6.85 Gm. per cent with albumin 4.5 and globulin 2.35 per cent, giving an A/G ratio of 1.9 1. Mazzini test of the blood was one plus, and Wassermann test negative. On December 30 the sedimentation rate was 22-42-48-50, and on January 7, 10-34-49-56. Stool examinations revealed no blood, ova, or parasites. Agglutination tests for Typhoid "O" and Typhoid "H" were negative. Blood cultures on December 31 and January 7 revealed no growth. No acid fast bacilli were seen in gastric washings. Roentgenographic studies on December 31 showed the heart to be of normal shape, size, and position. The right leaf of the diaphragm was elevated and flattened, with some fibrosis of the right base. There was considerable accumulation of air throughout the entire gastrointestinal tract, especially in the stomach and colon, suggesting possible paralytic ileus. On January 7 fluoroscopic studies disclosed limitation of the excursion of the dome of the right diaphragm with some regression of the infiltrations previously described in the right base. No abnormal collection of air or fluid appeared in the upper portion of the abdomen.

Clinical Course: The patient was given general supportive treatment and transfusions of whole blood. Her condition remained essentially unchanged until January 8 when sweating and pallor occurred and the temperature dropped to 94° F. Five minims of adrenalin was administered and she apparently recovered from the episode. Fever persisted and there was marked anemia. The patient died suddenly on January 13, 1948.

CLINICAL DISCUSSION

DOCTOR FARRIS: This 15-year-old white girl was admitted to the hospital and died approximately two weeks later. Her chief complaints were vomiting and abdominal discomfort. She had always been well until June 1947, when she became acutely ill with nausea and vomiting, cramping and protracted pain in the left lower quadrant, and fever.

There are relatively few intra-abdominal lesions that produce pain in the left lower quadrant. Diverticulitis is probably the most common of the intra-abdominal lesions that produce pain in this location. It occurs most-

ly in the sigmoid colon, and almost invariably in adults, less than two per cent of the cases being found in persons under 40 years of age. Except for the location in the left side, its symptomatology simulates that of appendicitis. Another possibility is that of a nonrotated colon with the appendix located on the left side. A Meckel's diverticulum may sometimes be located on the left side of the abdomen. Islands of gastric mucosa may be ectopic in a Meckel's diverticulum. The diverticulum may become ulcerated and perforate. With a Meckel's diverticulum, however, there usually is history of indefinite cramping abdominal pain over a long period of time, and, frequently, bright red blood in the stools if the ulcer is bleeding rapidly. Although regional ileitis usually gives pain on the right side, it could produce left lower quadrant pain. The usual history here, also, is of a long standing cramping abdominal pain. Furthermore, when perforation results in regional ileitis, it is more likely to end with internal or external fistulae or an abscess in the right lower quadrant than with free perforation into the peritoneal cavity and diffuse peritonitis. Tuberculous enteritis or peritonitis should be considered in a patient of this age. The onset of either of these diseases is insidious and the process is likely to be secondary to infection elsewhere, such as in the lungs, cecum, or lymph nodes. In tuberculous enteritis or peritonitis, pain is usually not severe and it may be associated with diarrhea. Furthermore, in such tuberculous infections, ascites is likely to occur. While primary peritonitis has been reported at all ages, less than one-third of the cases have occurred in individuals over four years old.

In this case generalization of abdominal pain followed later by some localization in the right lower quadrant suggests strongly the possibility of acute appendicitis. The nausea, vomiting, and pain were all present, and the fact that the pain originated in the left lower quadrant did not necessarily mean that there could not be acute appendicitis on the right side. No operation was performed, however.

Later, pain appeared in the upper right thorax. This may have been a pneumonic complication associated with a long immobilization, always a possibility when a sick patient lies in bed very long. It may, on the other hand, have been referred pain from the phrenic nerve and caused by inflammation in the subdiaphragmatic area. On July 24, over three weeks after the on-

set of the illness, the patient was admitted to the Indian Hospital in Talihina and was given several courses of penicillin, sulfadiazine, sulfaguanidine, and a course of streptomycin. These had no appreciable influence on her temperature, which was of the septic type averaging 103° F. at its peak. This failure to respond to chemotherapeutic measures helps to rule out peritonitis due to gonorrhea and also primary peritonitis.

On October 15, approximately four months following the onset of illness, tenderness and enlargement of the liver and a palpable, tender mass deep in the umbilicus were noted. The enlargement of the liver might be associated with intrahepatic abscess, with pylephlebitis, or with a subphrenic abscess. Patients with intrahepatic abscesses usually have chills and are icteric. Pylephlebitis is occasionally a complication of acute appendicitis. If the portal vein becomes completely obstructed there may be bleeding into the gastrointestinal tract. Marked anemia, such as this patient had, might then be significant. Chills, however, are usual in patients with pylephlebitis, and it is not stated that this patient had chills in the course of her illness. The possibility of a subphrenic abscess of some type is suggested by the roentgenographic studies that showed cloudiness in the right costophrenic angle and lack of mobility of the diaphragm.

A diagnosis was made on October 15 of subdiaphragmatic and intraperitoneal abscesses. On October 21 the abscess cavity was incised, and thick white pus was obtained. In view of the chronic nature of this illness, we naturally think of actinomycosis. Actinomycotic infection may begin in the cecum and appendiceal region, and may result in subdiaphragmatic abscesses. However, actinomycotic pus usually contains characteristic sulphur-yellow granules. Culture of the pus showed Gram-positive diplococci predominating with a few Gram-negative diplococci and bacilli. This mixed infection would not completely eliminate consideration of a perforated appendix or of primary peritonitis. As for the disappearance of the right thoracic pain, it is likely that the chemotherapy had attenuated the acuteness of the process.

The patient was taken home against advice on December 2, almost six months from the time she became ill. After a month at home, she was brought to this hospital on December 29. At the time of her admission the slight bilateral exophthalmos may have

been only apparent, and due to dehydration. The eyes, ears, and skin were as usual. The heart was not enlarged to percussion. The systolic murmur may have been congenital or may have been a hemic murmur. The lungs were normal to auscultation and percussion, an important finding in view of the previous thoracic pain. The abdomen was scaphoid, with a draining, unhealed incision 1 cm. in diameter in the midline. That incision had been draining for 10 weeks, indicating some interference with wound healing. Factors that would prevent wound healing include foreign bodies, such as fecoliths or sponges, and chronic infections, such as tuberculosis and actinomycosis. The hyperperistalsis and peristaltic rushes are almost pathognomonic for partial intestinal obstruction. The generalized abdominal tenderness may have been due to multiple intra-abdominal abscesses, to adhesive bands resulting from diffuse peritonitis, or may have resulted from a reinfection of the appendix. The mass felt in the cul-de-sac suggests an abscess in that area with thickened walls and inspissated pus. The blood studies indicate that an active infection was in progress. The anemia might be explained by the chronic, debilitating nature of the illness, or might result from blood loss in the gastrointestinal tract. The hemoglobin content and the red blood cell count rose steadily after admission to the hospital, presumably after the transfusions. The total protein content of the blood and the albumin-globulin ratio do not have significance with reference to diagnosis. Neither do the Mazzini and Wassermann tests of the blood. The sedimentation rates suggest merely that the patient continued to be very ill and that an active process was prevailing. The stool examination revealed no blood, ova, or parasites. Had there been bleeding from a Meckel's diverticulum, blood would appear some time in the course of repeated stool examinations. In amebiasis, the parasites are usually demonstrable in the stools. Amebic abscesses often occur without any history of amebic dysentery. Amebiasis in atypical cases may simulate appendicitis. The agglutination tests for typhoid were negative. Furthermore, perforation of a typhoid ulcer would have terminated this case earlier.

In my opinion, the most likely diagnosis here is acute appendicitis with perforation and diffuse peritonitis. I should also consider multiple intra-abdominal abscesses, subphrenic cellulitis, and abscesses formed

in multiple adhesions resulting from the diffuse peritonitis. Pylephlebitis and multiple intrahepatic abscesses must also be kept in mind. For the immediate cause of death, I would suggest overwhelming infection, toxemia with pulmonary embolic phenomena, rupture of a subphrenic abscess into the right pleural cavity, or finally, hemorrhage into the gastrointestinal tract or extensive hemorrhage into solid organs such as the liver or spleen.

NECROPSY FINDINGS AND COMMENT

DOCTOR HALPERT: The diagnosis made upon gross examination at necropsy (by Doctor Willard V. Thompson) was not unlike that at which Doctor Farris has arrived. Only when the histologic sections were examined did the causative agent become known. This girl was markedly emaciated at necropsy. The ribs were prominent, and the abdomen was distended. The peritoneal cavity contained 350 cc. of thick yellow green pus which covered all the surfaces, and formed an abscess in the pelvis minor. From this abscess a drainage tract extended into the operative wound. The loops of intestine were distended. In places their surfaces were matted together by fibrous adhesions, and elsewhere, they were covered by a thick exudate. There was clear, straw colored fluid in both pleural cavities, 150 cc. in the left and 100 cc. in the right. The pericardial cavity contained 100 cc. of similar fluid. Both lungs were firmly adherent

to the diaphragm, and their posterior portions were lumpy. In the upper pole of the spleen there was an abscess cavity about 8 cm. in diameter containing pus. The liver weighed 2600 Gm. and had three abscess cavities, one on the upper surface and one on the right anterior surface of the right lobe, and the third in the left lobe near the spleen. The appendix was intact and on the right side. There were no areas of thickening or ulceration in either the small or the large intestine.

Histologic examination of the lungs disclosed a chronic inflammatory process that caused an increase of the connective tissue between the lobules. The acini contained many large mononuclear cells. Here and there were aggregations of minute granules resembling micro-organisms, but the organisms could not be identified. Histologic examination of the abscess wall in the liver, however, revealed large nodular areas containing micro-organisms having radiating filaments with clublike ends. This confirmed the diagnosis at which Doctor Farris hinted, but which he could not confirm, that is, an actinomycotic lesion.

The final anatomic diagnosis was:

Abscesses of liver and spleen, actinomycotic, with peritonitis, chronic and acute, diffuse

Pneumonia, chronic, bilateral

Hydrothorax, bilateral, and hydropericardium.

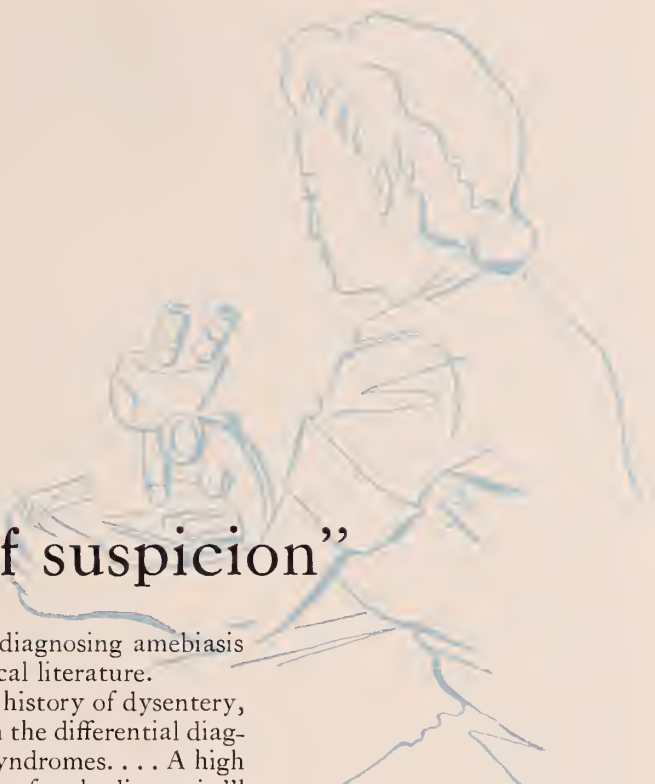
MEET OUR CONTRIBUTORS

Harold H. Macumber, M.D., Chickasha, wrote "Chronic Essential Pentosuria" in this issue of the Journal. Dr. Macumber attended the University of Omaha, and was graduated in 1938 from the University of Nebraska Medical School. He served his internship at Cleveland City Hospital and practices internal medicine. He is a member of the California Heart Association, Summitt County Medical Society, Akron, Ohio and is a commander in the medical corps of the U. S. naval reserve. Before coming to Chickasha, he practiced in Akron, Ohio and Vallejo, California.

Port Johnson, M.D., Muskogee, contributed the report of the sixteenth annual meeting of the American Academy of Orthopaedic Surgeons held in Chicago. Dr. Johnson attended Amherst College and received his medical degree from Syracuse University in 1932. He served his internship at Syracuse Memorial Hospital and is a member of the Bronx County Medical Society, New York State Medical Society, Oklahoma Orthopaedic Society in addition to other medical activities. Before coming to Muskogee he practiced in New York

City and was in the navy from 1942 to 1946. Dr. Johnson served the following residencies: traumatic surgery, Reconstruction Hospital Unit, N. Y. Post Graduate 1933-34, Surgery, C. C. Peck Memorial Hospital, Brooklyn, N. Y., 1934-35, orthopedic surgery, Morrisania City Hospital, N. Y. City, 1935-36, and was an associate in orthopedic surgery at the University of Oklahoma School of Medicine in 1946-47.

Johnny A. Blue, M.D., Oklahoma City, wrote "Psychogenic Aspects of Allergy" in this Journal. Dr. Blue attended Oklahoma City University and was graduated from the University of Oklahoma School of Medicine. He interned one year at Wesley Hospital in Oklahoma City. Dr. Blue is a member of the Association of American College of Physicians and is consultant in allergy at the out-patient clinic of the University of Oklahoma School of Medicine. He limits his practice to his specialty, allergy. Before coming to Oklahoma City he practiced in Guthrie and Guymon and was in the U. S. Naval Medical Corps as commander.



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The difficulties and pitfalls in diagnosing amebiasis are stressed frequently in medical literature.

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1. Warshawsky, H.; Nolan, D. E., and Abramson, W.: Hepatic Complications of Amebiasis, *New England J. Med.* 235:678 (Nov. 7) 1946.
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President's Page

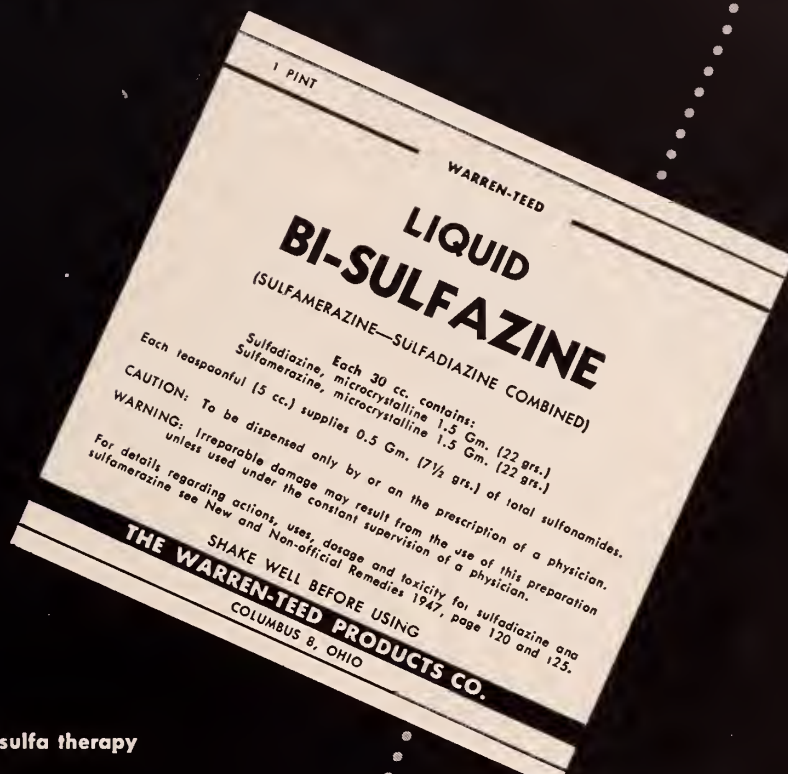
The Oklahoma State Medical Association has before it an opportunity and a challenge to strengthen its position in the estimation of the public. The action of the House of Delegates in the session just closed in recognizing the need for and establishing the Grievance Committee has received the widest recognition and most favorable commendation. Editors, columnists, and laymen alike have hailed the move with great enthusiasm, saying it is the most forward step taken by the Association in a generation and pointing to it as a practical means of combatting socialized medicine, —*if the committee functions*. Members of the medical profession, who were not in attendance at the meeting, have written in their endorsement.

It is our responsibility to see that the public interest is fairly and honestly served. Otherwise, faith in the medical profession will be lost. To that end let us pledge our deep interest, our cooperation and give our united support to the action of the committee so that it may function effectively.

Now is the time!

George H. Garrison
President.

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PUBLIC RELATIONS REPORTER

GRIEVANCE COMMITTEE IN THE NEWS

No action of Oklahoma State Medical Association has ever attracted more attention from the press than the creation of a Grievance Committee by the House of Delegates at the 56th Annual Meeting.

The committee, which will at all times be composed of the five immediate past presidents still living, was formed "to receive and investigate complaints dealing with alleged grievances for professional services."

The Council Report which recommended this action to the House of Delegates made the further recommendation that the newspapers of the state be requested to give publicity to the functions of this committee. Oklahoma physicians owe a vote of thanks to the press for doing just that, for the news stories and editorials telling newspaper readers about this committee make it possible for the committee to be of real service to the people of Oklahoma as nothing else could.

One of the many very excellent editorials about the Grievance Committee is reprinted below from the Tulsa Tribune of May 17, 1949:

"By setting up a statewide grievance committee, the members of Oklahoma Medical Association in convention here may have taken the most important business step in the society's history. If the doctors can use the committee to eliminate the complaints arising from their fees either by explaining the reasons for them satisfactorily or by forcing reductions where some members get out of line, more will be done to still the clamor for national compulsory health insurance than in any other way.

"American medical and surgical services are the best in the world. But the opinion has been allowed to expand that they can only be had for the rich or the charity poor; that the bill is too high for the family in between these extremes to pay. Since most American families are of the in-between category, it has been fairly easy to persuade many of them that maybe they should try a federal insurance scheme whereby they would pay a little each week whether well or ill and get what medical, surgical, dental and hospital service they need without extra charge.

"It sounds plausible, but it won't work in America because we have too many gold-brickers who would monopolize the time of all the professional men. But a few years more of inflationary costs and even occasional abuses of their prerogatives to charge what they please by the medical men, and the nation might decide to try the experiment anyway.

"The purpose of the grievance committee, as explained in the news reports yesterday, is to end even the occasional overcharge. County committees are to be set up, so administration will be available close to the person who feels he has been treated unfairly. While the doctors do not own and manage the hospitals in most instances, the committees will be excellent places to protest hospital bills that seem too high. The doctor and the hospital are partners and one will not want the other to be creating ill will, especially at a critical time like this.

"Dr. George H. Garrison, the new president of the Association, says that Oklahoma doctors are eager to develop better relations with the public. We believe he and his associates are on the right road to this desirable goal with their grievance committee plan which, they explain frankly, is set up to give the patient who thinks he has been overcharged a chance to do something about it.

"We applaud the public announcement of the names of members of the statewide committee, who are Dr. C. E. Northcutt of Ponca City, Dr. Paul Champlin of Enid, Dr. L. C. Kuyrkendall of McAlester, Dr. C. R. Rountree of Oklahoma City and Dr. James Stevenson of Tulsa. Often professional societies name grievance committees but keep the names secret, sometimes even from the members, and little good comes from the move even when it is sincere.

"It is difficult for the doctor to know what he should charge for his services. He can estimate his costs of doing business fairly well but there is no way he can tell in advance how many patients he will have in a year, nor the nature of their demands upon his skill and time. There are rules of thumb for setting fees, but they are far from perfect. Some surgeons charge a tenth of the annual income of the head of the family for

a major operation, some a twelfth, and some ten times the daily rental of the hospital room. Seldom are two patients charged the same amount for the same extensive service, though charges for office and home calls may be standardized. There are bugs in all these schemes.

"The rates paid for professional services under the voluntary medical, surgical and hospital insurance policies are too low in this period of high costs for nearly everything. They should be made more realistic, unless it is frankly the aim of these insurance societies to pay only part of the bill.

"The bills presented by some physicians and surgeons sometimes are too high, and too often they come as surprises to the patients. This can only mean one thing; that the bill has not been discussed in advance. For that oversight the patient must take the most of the responsibility, though somewhere in the code of medical practice there used to be a paragraph that the patient was to be put on notice.

"Since there is no exact science that can be called upon to set exactly the right fee in advance, and since sometimes emergencies rob patient and the doctor of the time for bargaining, the grievance committee plan of opening the door for post-care adjustments seems to be the logical way to bring justice and balance to a system that was getting out of hand and threatening to drive us all into a degenerating experience. That segment of society or business that practices self-restraint and, in its absence, self-regulation, deserves to be left unregimented."

(Note—On this same subject, read "Doctors' Idea Makes Sense" by Edith Johnson, reprinted on Page 286 of this issue of the Journal from the Daily Oklahoman of May 17, 1949.)

T-V POINTERS FROM A.M.A.

In answer to recent queries, the American Medical Association has suggested the following to help fans see television programs better and prevent eye fatigue: 1. A large screen is considered better than a small one, because it allows clearer vision at a greater distance and gives a larger visual angle. 2. A distance of 10 feet or more away from the screen would be better than a shorter distance, provided the size of the screen and of the room would permit. 3. The nearer perpendicularly the screen is viewed, the better. Too much of an angle produces distortion and makes coordination of the two images received by the eyes difficult. 4. Although there is not a definite time limit for watching television, some discretion should be used, and it should not be persisted in beyond the point of fatigue. 5. Daylight screens are considered better than the ordinary ones because they are compatible with more light in the room, thus reducing the contrast between screen and surrounding objects.



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PUBLIC RELATIONS KEYNOTES SESSION; REDISTRICTING TO AID PROGRAM

Marking the 56th Annual Meeting of the Oklahoma State Medical Association as one of the most significant to Oklahoma physicians and laymen was the establishment of a Grievance Committee. The action was taken by the House of Delegates at the session Sunday, May 15, Mayo Hotel, Tulsa.

Other action taken by the House of Delegates included revision of councilor districts, election of officers and new councilors, and the adoption of a program for 1949-50.

Approximately 700 physicians attended the three day sessions which closed Wednesday, May 18.

The establishment of a Grievance Committee is a long step toward better public relations for the profession in Oklahoma. It will provide for the people of the state an agency to consider individual complaints as to medical services rendered by members of the Association. Complaints will be considered from three viewpoints: 1. The amount of service rendered. 2. The responsibility assumed. 3. The patient's ability to pay.

Membership in the committee at all times will be composed of the five immediate past presidents still living. Members of the present committee are C. E. Northeutt, M.D., Ponca City; Paul Champlin, M.D., Enid; L. C. Kuyrkendall, M.D., McAlester; C. R. Rountree, M.D., Oklahoma City; and James Stevenson, M.D., Tulsa.

The redistricting committee's recommendations as approved by the council were accepted and the former 10 councilor districts have been changed to 14 with new councilors and vice-councilors elected in all the districts for staggered terms from one to three years. Districts 1, 4, 7, 10 and 13 will serve one year terms. Districts 2, 5, 8, 11 and 14 will have two year terms and Districts 3, 6, 9 and 12 were named for three years. After 1949, councilors and vice-councilors will be elected for terms of three years.

Counties in the new districts and councilors elected are:

District No. 1: Craig, Delaware, Mayes, Ottawa, Rogers, Washington.—F. S. Etter, M.D., Bartlesville, Councilor; W. Jackson Sayles, M.D., Miami, Vice-Councilor.

District No. 2: Kay, Noble, Osage, Pawnee, Payne.—L. A. Mitchell, M.D., Stillwater, Councilor; J. W. Francis, M.D., Perry, Vice-Councilor.

District No. 3: Garfield, Grant, Kingfisher, Logan.—Bruce Hinson, M.D., Enid, Councilor; C. M. Hodgson, M.D., Kingfisher, Vice-Councilor.

District No. 4: Alfalfa, Beaver, Cimarron, Ellis, Harper, Major, Texas, Woods, Woodward.—Daniel B. Ensor, M.D., Hopeton, Councilor; O. C. Newman, M.D., Shattuck, Vice-Councilor.

District No. 5: Beckham, Blaine, Canadian, Custer, Dewey, Roger Mills.—O. C. Standifer, M.D., Elk City, Councilor; A. L. Johnson, M.D., El Reno, Vice-Councilor.

District No. 6: Oklahoma—R. Q. Goodwin, M.D., Councilor; W. W. Rucks, Jr., M.D., Vice-Councilor.

District No. 7: Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, Seminole.—Ned Burleson, M.D., Councilor; W. T. Mayfield, M.D., Norman, Vice-Councilor.

District No. 8: Tulsa—M. J. Searle, M. D., Tulsa, Councilor; W. S. Larrabee, M.D., Tulsa, Vice-Councilor.

District No. 9: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner.—Shade Neely, M.D., Muskogee, Councilor; F. R. First, Jr., M.D., Checotah, Vice Councilor.

District No. 10: Haskell, Hughes, Latimer, LeFlore, Pittsburg.—Earl M. Woodson, M.D., Poteau, Councilor; E. H. Shuller, M.D., McAlester, Vice-Councilor.

District No. 11: Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha.—W. K. Haynie, M.D., Durant, Councilor; L. E. Gee, M.D., Broken Bow, Vice-Councilor.

District No. 12: Carter, Garvin, Johnston, Love, Marshall, McClain, Murray, Pontotoc.—J. H. Veazey, M.D., Ardmore, Councilor; W. T. Gill, M.D., Ada, Vice-Councilor.

District No. 13: Caddo, Comanche, Cotton, Grady, Jefferson, Stephens.—J. L. Patterson, M.D., Duncan, Councilor; H. M. McClure, M.D., Chickasha, Vice-Councilor.

District No. 14: Greer, Harmon, Jackson, Kiowa, Tishman, Washita.—L. G. Livingston, M.D., Cordell, Councilor; J. B. Hohis, M.D., Mangum, Vice-Councilor.

In addition to the councilors, new officers named for the O.S.M.A. are Ralph A. McGill, M.D., Tulsa, president-elect; H. Violet Sturgeon, M.D., Hennessey, re-elected vice-president; Lewis J. Moorman, M.D., Oklahoma City, re-elected secretary-treasurer; John F. Burton, M.D., Oklahoma City, and James Stevenson, M.D., Tulsa, delegates to the A.M.A.; and Malcolm E. Phelps, M.D., El Reno, and Finis W. Ewing, M.D., Muskogee, alternate delegates to the A.M.A. George H. Garrison, M.D. took office as president of the O.S.M.A. at the annual meeting.

The House of Delegates adopted a four point program for 1949-50. Primary objectives of that program are:—1. Adequate medical care and health services for all the people. 2. An extension of public health services in the prevention of disease. 3. The establishment of a State Health Planning Board. 4. A closer liaison with the allied professions and the consumer in accomplishing these objectives.

The public relations program of the O.S.M.A. as adopted in the past year by the Public Policy Committee was unanimously approved. The House of Delegates authorized the continuation and expansion of the work of the Public Policy Committee to provide funds necessary for that purpose. The House of Delegates, recognizing that the public relations of the profession in Oklahoma are closely identified with relations of the profession nationally, reaffirmed its support and endorsement of the educational campaign of the American Medical Association and urged upon the public policy committee the of cooperation and coordination in the campaign as outlined by the A.M.A.

SCIENTIFIC PROGRAM

Scientific papers representing all phases of medicine were presented by Oklahoma physicians and guest speakers. Approximately 75 papers were presented during the three day session. Roundtable medicine and surgery luncheon discussions at noon each day were popular events with the physicians attending.

Guest speakers were J. Edward Berk, M.D., Assistant Professor of Medicine, Temple University School of

Medicine, Philadelphia; Charles Decatur Blassingame, M.D., Clinical Associate, Department of Otolaryngology, University of Tennessee School of Medicine, Memphis; C. Charles Burlingame, M.D., President and psychiatrist-in-chief, Institute of Living, Hartford, Conn.; John Albert Key, M.D., Professor of Orthopedic Surgery, Washington University School of Medicine, St. Louis, Missouri;

William James Gardner, M.D., Department of Neurological Surgery, Cleveland Clinic Foundation, Cleveland, Ohio; Paul Arthur O'Leary, M.D., Director of the Section of Dermatology and Syphilology, Mayo Clinic Foundation, Rochester, Minnesota; Myron Ezra Wegman, M.D., Professor of Public Health, Louisiana State University School of Medicine, New Orleans; Frank E. Whitacre, Professor of Obstetrics-Gynecology, University of Tennessee School of Medicine, Memphis, Tennessee;

Wolfgang William Zuelzer, M.D., Chief of Staff and Director of Children's Hospital of Michigan, Detroit, Michigan; Edwin G. Williams, M.D., Senior Surgeon Chief of Radiological Health Branch, U. S. Public Health Service, Washington, D. C.; and Frank Bertram, D.D.S., Oklahoma State Department of Health, Oklahoma City.

WOMEN'S AUXILIARY

More new county medical society auxiliaries have been organized in Oklahoma than in any other state was the report made at the meeting of the Women's Auxiliary of the Oklahoma State Medical Association during the annual meeting in Tulsa in May. Mrs. J. W. Kelso, Oklahoma City, has been organization chairman. She is also president of the Southern Medical Association Auxiliary and was elected vice-president of the Oklahoma Auxiliary at the meeting.

Other new officers are Mrs. Clinton Gallaher, Shaw-

nee, president; Mrs. James F. McMurry, Sentinel, president elect; Mrs. Charles F. Paramore, Shawnee, secretary; Mrs. J. Hobson Veazey, Ardmore, treasurer; Mrs. Hartzell Schaff, Holdenville, historian; Mrs. F. L. Wormington, Miami, parliamentarian. Mrs. F. Redding Hood, Oklahoma City, was named convention chairman for next year.

Other business taken up at the session included passage of a resolution to send to Washington taking a stand against compulsory health insurance. The new constitution, written under the direction of Mrs. George H. Garrison, Oklahoma City, was also approved by the group. Four nurse loan scholarships, a continuation of a project begun last year were awarded.

Councilors chosen will be announced in a later edition of the Journal.

Luncheons and other social events were given for members of the auxiliary attending the meeting.

ENTERTAINMENT VARIED

On the social calendar at the Annual Meeting of the O.S.M.A. were the President's Annual Dinner Dance Tuesday night, May 17, the skeet shoot, golf tournament, and past president's breakfast.

Jack Akins, M.D., Tulsa, won the golf tournament trophy and A. L. Frew, M.D., Oklahoma City, was high point man in the skeet shoot. Both events were held Monday, May 16, with a subscription dinner following the golf tournament at the Tulsa Country Club. The skeet shoot was held at Southern Hills Country club.

Cal Tinney, well known humorist from Broken Arrow, presented the program at the inaugural dinner. Following the dinner, a dance was held in the Crystal Ballroom of The Mayo. The Tulsa County Medical Society was host at a social hour preceding the dinner.

RESIDENCY SET UP BY A.M.A. TO TRAIN FAMILY DOCTORS

The American Medical Association has announced approval of a residency specifically designed to train family doctors and new requirements for approval of hospitals for intern training.

Previously the A.M.A. Council on Medical Education and Hospitals had approved hospitals for general or mixed residencies, which were rather loosely organized training programs, for the purpose of providing additional experience following internship.

The residency for general practice will provide supervised training in the four major clinical divisions — internal medicine, surgery, obstetrics-gynecology, and pediatrics — as well as in the auxiliary services of anesthesiology, pathology, and radiology.

RADIOLOGISTS MEET

The Oklahoma State Radiological Society met Tuesday, May 17, during the Annual Meeting of the Oklahoma State Medical Association, Mayo Hotel, Tulsa. A regular business meeting was held followed by a scientific program in which Lucien Pascucci, M.D., Tulsa, presented radiographs of interest for general discussion. Officers of the group are P. E. Russo, M.D., Oklahoma City, president; H. Benjamin Yagol, M.D., Ada, vice-president; and Walter E. Brown, M.D., Tulsa, Secretary-treasurer.

O.S.M.A. MEMBERS ASSIST WITH SPEECH-HEARING CLINIC

Planned especially for the benefit of parents, teachers, nurses, physicians, and students interested in or working with handicapped children, a speech and hearing conference was held at the University of Oklahoma May 23-27.

Those on the program were John F. Burton, M.D., Chester McHenry, M.D., and G. H. Guthrey, M.D., all of Oklahoma City, C. E. Brighton, M.D., Tulsa, medical director of the cerebral palsy institute at Norman sponsored by the American Legion, and Mrs. Spencer Tracy, Los Angeles.

Dr. Burton, professor of surgery at the medical school, discussed cleft palate surgery and Dr. McHenry, chairman of the department of otorhinolaryngology, spoke on medical aspects of speech and hearing disorders. Dr. Guthrey, a clinical assistant in the department of psychology and neurology, described psychiatry's role in personality disorders of children. Dr. Brighton discussed medical phases of cerebral palsy.

CORRECTION

Through error, when the applications for Life Membership were printed in the May, 1949, issue of the Journal, the name R. M. Howard, M.D., Oklahoma City, was omitted.

HOLBROOK, GRAY, PETTY HONORED AS PIONEER PRACTITIONERS

A trio of physicians, all pioneer Oklahoma practitioners, were recognized for their contributions to medicine in Oklahoma by special ceremonies awarding the Oklahoma State Medical Association Fifty Year Club Pin.

New wearers of the pin are Ray Holbrook, M.D., Perkins, C. S. Petty, M.D., and Dan Gray, M.D., Guthrie.

Forty-six physicians and guests were present at Holbrook's Cafe (owned by Dr. Holbrook's son), Perkins Corner, for the meeting honoring Dr. Holbrook. Horace Reed, M.D., Oklahoma City, presented the pin on behalf of the O.S.M.A. and L. A. Mitchell, M.D., Stillwater, presided. Other out of town guests were Lea Riely, M.D., Oklahoma City, and Fred Glass, M.D., Tulsa. Dr. Glass' father and Dr. Holbrook grew up together in Kentucky. Dr. and Mrs. E. Gordon Ferguson, Oklahoma City, and Ray Holbrook, Perkins, were also present. Mrs. Ferguson is Dr. Holbrook's daughter. Other children of Dr. Holbrook who were unable to attend are Robert L., Cleveland, Ohio, and Finley of San Antonio.

Dr. Holbrook, the 44th doctor to become licensed in Oklahoma, started practicing medicine in Oklahoma "by accident." On his way to California he stopped in Perkins to visit his father and there he stayed — driving his team, and later on, his car, over the prairies of central Oklahoma ministering to the sick of Payne and surrounding counties. Dr. Holbrook retired from active practice before World War II but resumed his practice during the war when there was a scarcity of doctors in that locality. The war proved a personal tragedy as the strain of overwork brought on a cerebral hemorrhage in 1942 and he has been inactive since that time. Dr. Holbrook studied at Holbrook university in Lebanon, Ohio; Louisville university in Kentucky, and finished at St. Louis university. For four years he was a Republican state committeeman. He is a 32nd degree Mason, a member of the Scottish Rite, and one of the charter members of the Isaac Walton League of Oklahoma.

Two other 50 year club members are now proudly wearing the gold lapel button but were reluctant at first to accept the pin because they "didn't want anyone to think that meant they were retiring."

PUBLIC HEALTH OFFICERS NEEDED IN JAPAN

The Department of the Army is urgently in need of public health officers to serve in a civilian capacity with the occupation forces in Japan. The salary for these positions is \$6235.20 per annum plus 10 per cent post differential with quarters provided at no cost. Individuals selected must agree to remain a minimum of two years. Transportation is furnished to and from Japan and dependents may join the employee in approximately six to eight months after his arrival in the command.

The positions involve supervision of Japanese prefecture (state) health departments in all phases of preventive medicine and medical care programs. Civil Service Commission Standard Form 57 (obtainable from any post office) should be submitted to Charles C. Furman, Chief, Recruitment Section, Overseas Affairs Branch, Civilian Personnel Division, Department of the Army, Washington 25, D. C.

The two Guthrie doctors, Dr. Gray and Dr. Petty, have practiced in that Logan county seat for more than a quarter and a half a century respectively.

When Dr. Gray came to Oklahoma 21 years ago he was named the "state's most educated doctor." Dr. Gray is the only fellow of the American College of Surgeons in Guthrie and the only member of the Royal Society of Medicine, London, in the state. Dr. Gray was graduated from Miami Medical College, Cincinnati, Ohio, in 1899.

Dr. Petty, whose son, James S. Petty, is also a Guthrie physician, was graduated from Chicago Homeopathic Medical College in 1897. He has been in practice in Guthrie for the past 52 years. Hospitalized at Benedictine Heights hospital in Guthrie at the time his 50 year pin was presented, a special informal ceremony was held at the hospital. A participant in county, state and national medical organizations, Dr. Petty has also been active in civic affairs in Guthrie.

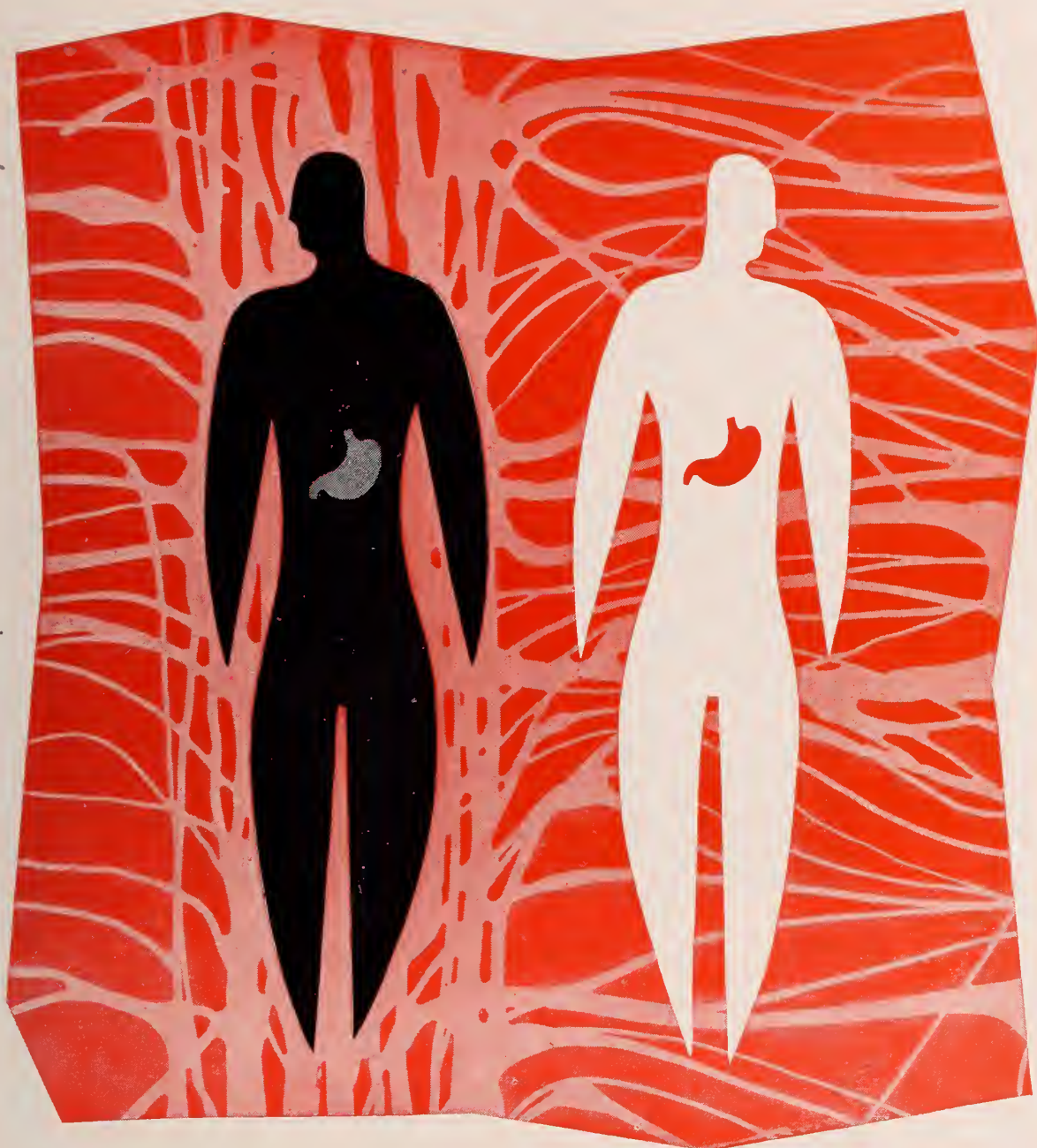


Dan Gray, M.D., Guthrie, and Phillips R. Fife, M.D., Guthrie. Dr. Fife is Logan County Secretary.

BLUE SHIELD PLANS APPROVE NATIONAL ENROLLMENT AGENCY

After receiving a report from the Council on Medical Service of the American Medical Association, implying that Associated Medical Care Plans might soon be free to establish its own national enrollment agency, the 1949 Annual Conference of Blue Shield plans voted on April 19, 1949, to establish such an agency, to be known as the Blue Shield Health Service, Inc. Blue Cross, in the meantime, has proceeded with its own plans to establish a Blue Cross Association and a Blue Cross Health Service, Inc.

Chief among the functions to be performed by such a Blue Shield agency would be the coordination of Blue Shield enrollment when dealing with national accounts, which are defined as groups of employees working for firms with locations scattered throughout the country in a way which prevents any one Blue Shield Plan from serving the entire group.



The psychosomatic price

The tensions of modern living demand a price that is frequently gastrointestinal injury, occasionally peptic ulcer. The prevention and cure of peptic ulcer embrace the application of hygienic, psychiatric, dietary, and therapeutic techniques to this problem.

Logically, therapy should include the administration of materials which will tend to reduce the acidity

of the gastric content without producing alkalosis or other undesirable effects. Coincidentally, a demulcent effect should be sought to coat the ulcerated surfaces and protect them from erosion. *Lederle* research has found that a casein, low in sodium, high in calcium, in appropriate form, when given by mouth will accomplish these ends and provide the patient with prompt symptomatic relief.

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ANNOUNCEMENTS

MERCY HOSPITAL. Medical staff will meet July 14 at 6:15 p.m. at the Mercy Hospital classroom, Oklahoma City. W. T. McCollum, M.D., will present a paper on "Treatment of Acute Myocardial Infarction" including anti-coagulant therapy.

CHICAGO MEDICAL SOCIETY. Two postgraduate courses will be offered in October, 1949, each of one week duration, which will be open to all physicians who are members of their local medical societies. Cardio-renal and peripheral vascular diseases will be given October 17-22 and a course in obstetrics, endocrine-gynecology and sterility will be offered October 24-29. Additional information may be secured by writing Dr. Willard O. Thompson, Chairman, Committee on Post-graduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois.

SOUTHERN PEDIATRIC SEMINAR. 29th session, July 18-30, 1949. Methods of diagnosis, prevention and treatment of diseases of children will be discussed with the course designed primarily to fit the needs of the general practitioner. For information and registration address M. A. Owings, Secretary-Treasurer, Saluda, N. C.

POSTGRADUATE COURSE. Modern Treatment of Fractures and Other Traumatic Conditions, post-graduate course at Massachusetts General Hospital under the auspices of the Harvard Medical School will be offered October 24 to November 3. For further information write Harvard Medical School, 25 Shattuck Street, Boston, Mass., Assistant Dean, Courses for Graduates.

POSTGRADUATE MEDICAL ASSEMBLY OF SOUTH TEXAS. Fifteenth annual meeting, November 29, 30 and December 1, 1949, New Shamrock Hotel, Houston, Texas. For further information address the Secretary, 229 Medical Arts Building, Houston, Texas.

AIR CORPS ADDS G.P.

Air Surgeon General Malcolm C. Grow has announced that his office is initiating a general practice branch which will be charged with the development of training opportunities and careers for general practitioners serving at USAF installations. Gen. Grow characterized the general practitioner as "the backbone of the air force medical service." Approximately 70 per cent of physicians serving with USAF units are general practitioners; five per cent are staff and administrative personnel and 25 per cent are specialists.

GORGAS AWARD TO DENTIST

Dr. H. Trendley Dean, dental director U.S.P.H.S. and director of the National Institute of Dental Research, has been selected by the Association of Military Surgeons of the United States to receive the Gorgas Award of 1949 "for outstanding contributions in the field of military medicine." Dr. Dean and his associates at the national institute of dental research have been responsible for most of the basic research on the effect of fluoride in water on dental caries. Their findings may lead to the mass prevention of dental decay through fluoridation of public water supplies.

OKLAHOMAN NAMED

N. D. Helland, Tulsa, executive director of Oklahoma's Blue Cross and Blue Shield plans, was re-elected by the 1949 annual conference of Blue Shield plans to represent the District XII, district-at-large. The Blue Shield Commission election was held late in April at the annual conference at Hollywood, Florida.

VETERANS TREATED

More than 27,000 veterans of Missouri, Arkansas and Oklahoma were treated during the first half of fiscal year 1949 under the "home town" medical program for veterans, C. H. Beasley, M.D., area medical director of the Veterans Administration, announced. Of this number 2,055 were treated through the Muskogee office and 3,621 were cleared through the Oklahoma City office.

OBITUARIES

GEORGE HERBERT STAGNER, M.D. 1876-1949

G. H. Stagner, M.D., pioneer Beckham county physician and surgeon died April 25 at the veterans hospital at Amarillo, Texas.

Dr. Stagner was born August 28, 1876 at Mt. Sterling, Ill. He served overseas in the first World War coming back to Erick, Oklahoma following the war. He moved to Edmond February 1, 1947 and in November of that year he suffered a cerebral hemorrhage. He had been hospitalized since that time.

Dr. Stagner was a member of the Christian church and a Sunday school teacher; he was the first president of the Erick Rotary club and served as seventh district commander of the American Legion. He was to

have received a 50 year Masonic pin.

He is survived by his widow and one daughter.

O. O. HAMMONDS, M.D. 1880-1949

O. O. Hamonds, M.D., Oklahoma City, died May 20 of cancer.

Dr. Hammonds, a former state health commissioner, was born March 27, 1880 in Chapel Hill, Ark. He was a practicing physician in Okmulgee until the appointment as health commissioner in 1927. Following his resignation, he entered private practice in Oklahoma City specializing in internal medicine and surgery.

Survivors include his widow of the home, two sons, three grandchildren, and three sisters.



ALGERNON C. SWINBURNE 1837-1909

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The famous English poet, Algernon Charles Swinburne, who began to show signs of epilepsy at the age of 25, is a prominent example that despite epilepsy a man may develop to true greatness.

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HAVE YOU HEARD?

Leslie Hamm, M.D., Lawton, discussed socialized medicine before the Optimist Club of that city recently.

Glen W. McDonald, M.D., Pawhuska, presided when the Pawhuska Kiwanis club held an informal discussion on national health insurance.

Dan R. Sewell, M.D., formerly of Oklahoma City, has been promoted to the rank of full colonel and placed in command of the Kindley airforce base station hospital in Bermuda.

D. W. McCauley, M.D., Okmulgee, spoke on compulsory health insurance at the Okmulgee Rotary club.

R. D. Williams, M.D., Idabel, recently won a national essay contest on "Anesthesia."

Dr. and Mrs. William L. Bonham, Oklahoma City, have selected the name, Priscilla Richmond, for their daughter born April 30.

Paul Champlin, M.D., Enid, has been named chairman of the special gifts committee for the Enid cancer drive.

I. T. Bond, M.D., Comanche, has recently moved into a newly redecorated office.

H. A. Stalker, M.D., Pond Creek, won a first place trophy recently in the Northern Oklahoma Gun Club contest at Ponca City.

Charles W. Letcher, M.D., Miami, was guest speaker on socialized medicine at a recent meeting of the Vinita Rotary club. The program was arranged by *Lloyd McPike, M.D.*, Vinita.

Joseph Henke, M.D., Hydro, was featured in an article in the Farmer-Stockman entitled "Good Doctors Will Find a Welcome in the Country."

W. R. Coyner, M.D., Edmond, discussed nutritional deficiencies at the demonstration school's P-T.A.

A. W. Truman, M.D., Ardmore, was a recent speaker at the Big Tabernacle, Chickasha.

J. M. Gordon, M.D., has returned to Ardmore to resume his work as county health director after spending the past seven months studying tuberculosis at the veterans hospital at Legion, Texas.

M. K. Braly, M.D., Mooreland, has returned home after taking a postgraduate course at the U. S. naval hospital at Bethesda, Maryland.

Harold L. Beddoe, M.D., Tulsa, has been named head of the medical bureau of the Tulsa City Police department.

Charles Green, M.D., Lawton, gave the principal address when the Lawton Rotary club entertained the graduating ninth grade junior high class of that city.

J. H. Goldberger, M.D., El Reno, was named second vice-president of the Lions club of that city.

Roy Melinder, M.D., Claremore, spoke on cancer at a chamber of commerce luncheon there recently.

Ralph Phelan, M.D., Hobart, was recent guest speaker at the Business and Professional Women's club in Hobart.

Charles Cunningham, M.D., Poteau, spoke on "Recent Medical Discoveries—Their Use and Cure of Certain Diseases" before the 1913 Study Club.

N. H. Cooper, M.D., Ponca City, was elected secretary of the school health council.

Charles Roberts, M. D., Enid, attended a two weeks heart postgraduate course in Philadelphia sponsored by the American College of Physicians.

George S. Barter, M.D., Shawnee, has been elected president of the Oklahoma Tuberculosis association for his third consecutive term.

O. L. Parsons, M.D., Lawton, represented his Boy Scout council at the national meeting in Boston May 23 and 24.

Keith Oehlschlager, M.D., Yale, has been elected chairman of the board of city commissioners.

Webber Merrell, M.D., Guthrie, has been named mayor of that city.

Hartzell Schaff, M.D., Holdenville, is constructing a new home in the Country Club addition.

S. P. Roberts, M.D., Nowata, has been named city superintendent of health.

A. R. Sugg, M.D., Ada, is assisting in setting up the proposed semi pro league in Ada.

C. C. Keppler, M.D., Woodward, is building a new home in that city.

L. G. Livingston, M.D., Cordell, hopes to have his new clinic ready for occupancy by August 15.

C. E. Williams, M.D., Woodward, attended the National Council of Boy Scouts of America meeting in Boston, the A.M.A. in Atlantic City, and made a 10-day tour of the New England states.

D. P. Richardson, M.D., Union City, recently celebrated his 80th birthday. Patients and friends gathered for a basket dinner and program to celebrate the occasion.

C. R. Rountree, M.D., Oklahoma City, presented a paper on the "Fusion of the Shoulder in Chronic Auto-genous Bone Graft" at the American Orthopedic association meeting in Colorado Springs in May.

William G. McCreight, M.D., Oklahoma City, has just completed a three year course in dermatology syphilology at Mayo's and will have his office at 525 N.W. 11th, Oklahoma City. Dr. McCreight was graduated from the University of Oklahoma in 1940 and has recently passed his board examination.

County Superintendents of Health recently appointed are J. B. Clark, M.D., Coalgate, Coal County; J. M. Gordon, M.D., Ardmore, Carter County; and A. C. Fina, M.D., Atoka, Atoka County.

James B. Thompson, M.D., Tulsa, has been certified as a diplomate of the American Board of Surgery.

Dr. and Mrs. William S. Bivens, Tulsa, are parents of a new daughter that arrived March 20.

Frank A. Stuart, M.D., Tulsa, made a six weeks tour of duty with medical units in England and Europe.

DO YOU KNOW?

First Lieutenant's bars were pinned on James L. Patterson, jr., M.D., Duncan, in a special ceremony in Washington, D. C.

Dr. Patterson and two other young volunteers were the first to answer a recruiting campaign. Dr. Patterson was assigned to Japan.

He was allowed to use the same bars for the ceremony that his father, J. L. Patterson, M.D., wore in World War I.

MEDICAL SOCIETIES AROUND THE STATE

Tulsa County

Closing the Tulsa County's scientific meetings for the summer as the May 9 program at which Henry S. Browne, M.D., Tulsa urologist, spoke on "Problems in the Management of Hydronephrosis." A roundtable discussion of state medicine and its probable effect upon the medical doctor was a special feature of the May 9 meeting. Participants were James Stevenson, M.D., John E. McDonald, M.D., Victor K. Allen, M.D., Rayburne W. Goen, M.D. and J. D. Shipp, M.D. served as moderator.

Pottawatomie County

K. W. Navin, M.D. was program chairman and C. C. Young, M.D. led the discussion when the Pottawatomie County Medical Society met May 18 in Shawnee. Dr. Navin's topic was "Syphilis, with Reference to Serological Fastness."

Garfield County

Ben H. Nicholson, M.D., Oklahoma City, was guest speaker at the May 26 meeting of the Garfield County Medical Society in Enid.

Oklahoma County

Scientific programs for the summer months were concluded for Oklahoma County with a buffet supper and meeting at the Oklahoma Club May 24.

Pittsburg County

Port Johnson, M.D., Muskogee, discussed "Backache and Sciatica" at a recent Pittsburg County Medical Society meeting.

Muskogee-Sequoyah-Wagoner

Members of the staffs of the Veterans Hospital and the Veterans Administration attended the meeting of the Muskogee-Sequoyah Wagoner County Medical Society when Robert H. Bayley, M.D., Oklahoma City, was the guest speaker. Dr. Bayley is professor of medicine at the University of Oklahoma School of Medicine.

Carter County

John E. McDonald, M.D., Tulsa, addressed a member of the Carter County Medical Society and Auxiliary at a May meeting. Dr. McDonald, president of the Tulsa County Society, spoke on compulsory health insurance as opposed to voluntary health insurance and explained the Tulsa county plan for the care of the indigent.

Northwest Counties

Members of the Northwest County Medical Society and their wives held a recent meeting at the Mooreland hospital. A resolution was passed by the group opposing legislation which imposes compulsory health insurance and scientific papers were presented by Charles M. O'Leary, M.D., and Cleve Beller, M.D., Oklahoma City.

Greer County

The Greer County Medical Society and Auxiliary met in Mangum for the May meeting. Both groups had business meetings following the dinner and a social hour followed the business meetings. Dr. and Mrs. D. D. Pierson were hosts.

Tri-County

The May meeting of the Tri-County Medical Society was held in Hugo May 10. At the April meeting of the group, an auxiliary was formed with members from McCurtain, Choctaw and Pushmataha.

Blaine County

Paul Champlin, M.D., Enid, was guest speaker at a recent Blain County Medical Society meeting held in Canton. The Auxiliary also met at that time following a joint dinner of the two groups.

Stephens County

The Stephens County Medical Society has been joined by the Exchangette Club of Duncan in passing a resolution against compulsory health care. Fred L. Patterson, Jr., M.D., is public policy chairman of the Stephens County Medical Society.

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MEDICAL ABSTRACT

CIRROID ANEURYSM OF THE SCALP. *Annals of Surgery.* Orville F. Grimes, M.D. and Norman E. Freeman, M.D. 129:1 :123-131 (January) 1949.

"It is now generally agreed that the cirroid aneurysm is a form of arterio venous fistula in which the earliest abnormal communications are between the arterioles and the venules. The inciting factor is believed to be trauma, frequently trivial, which results in rupture of the small vessels and brings about false communications between the smaller arteries and veins. The ultimate effect of such abnormal openings is to divert blood under arterial pressure directly into the venous system with resultant venous dilatation. The decreased resistance to the flow of blood from artery to vein at the site of the fistula as compared to the resistance to the flow of blood thru the capillary bed elsewhere leads to an increase in the volume of blood flowing thru the fistula and results in dilatation of all the vessels in the neighborhood. The cirroid aneurysm comes to be composed essentially of two parts, the fistula itself and the dilated afferent and efferent vessels."

With this clear cut definition of a condition that is

most often found involving the scalp, face, hands, and the feet, the authors then discuss the method of handling these cases.

Differential diagnosis, including x-rays with thorotrast is outlined. The various methods of treatment are detailed with the following conclusion:

"The most effective means of treatment is by complete surgical removal. In spite of all precautions this operation carries some risk from severe hemorrhage. Cirroid aneurysms are cured by excising or eliminating by ligation the abnormal communications between arteries and veins. It is not always possible to ascertain the exact site of such fistulae. In order to be certain that all of them have been extirpated, it is frequently necessary to remove large masses of dilated vessels. If an abnormal opening is overlooked some of the dilated vessels will persist. The phenomena has led some observers to regard cirroid aneurysms as neoplastic in origin. However, the evidence, both histologic and from follow-up studies, suggests that they are not neoplastic."—John F. Burton, M.D.

BOOK REVIEW

HEMATOLOGY. Cyrus C. Sturgis, M.D. Springfield, Illinois, Charles C. Thomas, Publisher, 1948. 915 pages.

This book covers comprehensively the entire field of clinical hematology. Every effort has been made to discuss the disease states on the basis of the broad aspect of clinical practice rather than solely from the narrower viewpoint of a highly specialized branch of internal medicine.

A careful digest and evaluation of accumulated knowledge of hematology from the earliest beginnings of scientific medicine down to the latest developments in the subject is incorporated in this work. This adds an interesting and valuable touch to this attractive book. Obviously the author has devoted much time and research in order to bring this aspect of the subject to the attention of his readers. The material is

epitomized and combined with conclusions drawn by the author who has had an unexcelled opportunity to observe and treat, over a long period of time, a large series of patients with disorders of the blood.

With the recent and extensive additions to our knowledge, it is essential that a carefully compiled and comprehensive bibliography on the subject be presented. An attempt has been made to collect, verify, and arrange conveniently, all of the key references down to the date of publication. There are many good illustrations and diagrams, both in color and black and white.

The book is written for practitioners, postgraduate and undergraduate students, and also for advanced scholars. The author is well known to many members of the Oklahoma State Medical Association and his book should have a hearty reception here.—J. W. Morrison, M.D.

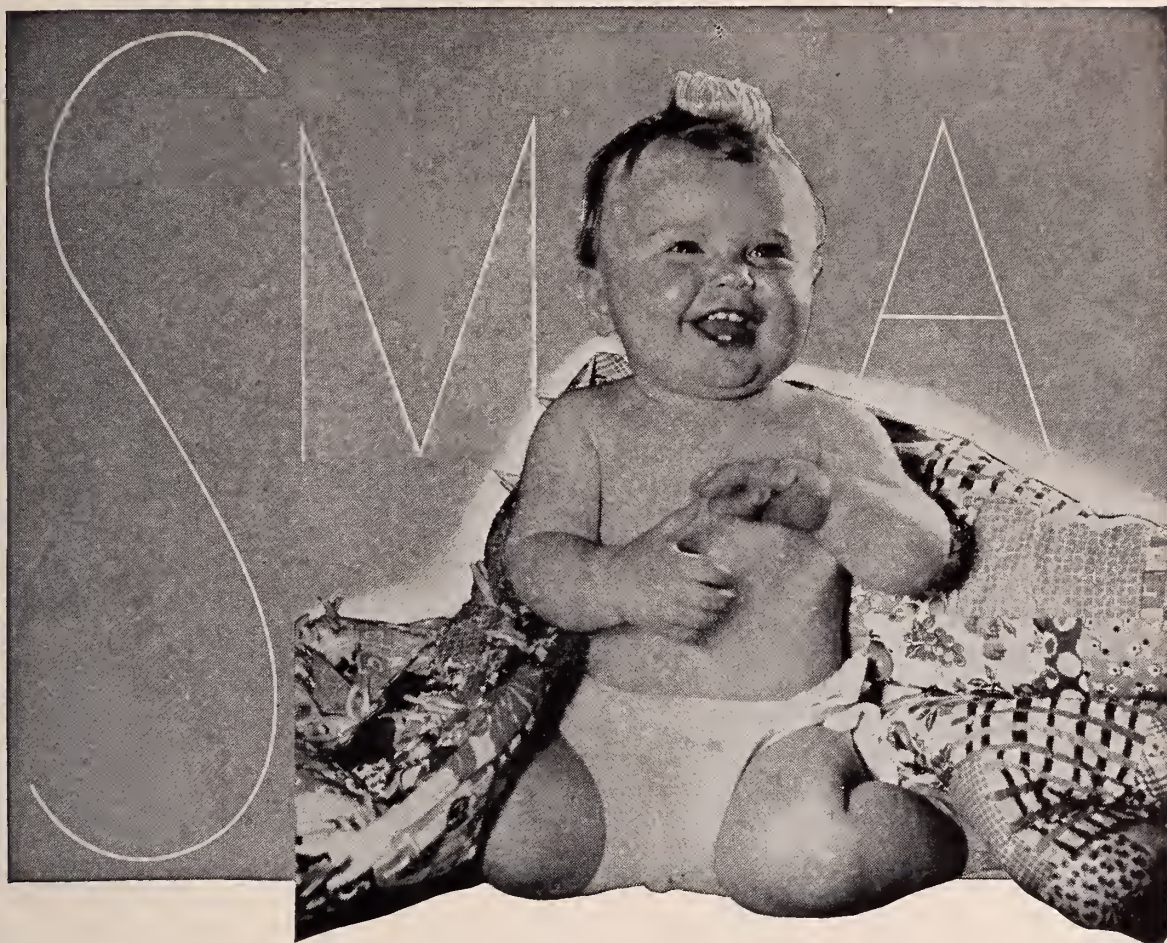
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| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | B. B. Coker, Durant | Second Tuesday |
| Beckham..... | H. K. Speed, Sayre | E. S. Kilpatrick, Elk City | Third Thursday |
| Blaine..... | W. F. Bohlman, Watonga | Virginia Curtin, Watonga | Third Thursday |
| Caddo..... | C. R. Waterbury, Apache | Edward T. Cook, Jr., Anadarko | Subject to Call |
| Canadian..... | J. N. Goldberger, El Reno | Jack W. Myers, El Reno | Second Tuesday |
| Carter..... | Roger Reid, Ardmore | Royce Means, Ardmore | First Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | R. K. McIntosh, Jr., Tahlequah | |
| Choctaw-McCurtain- Pushmataha..... | L. E. Gee, Broken Bow | II. D. Wolfe, Hugo | |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Fourth Thursday |
| Comanche..... | Walter Wicker, Lawton | Charles Green, Lawton | Second Tuesday |
| Cotton..... | A. B. Holstead, Temple | Mollie Seism, Walters | Third Friday |
| Craig..... | J. M. McMillan, Vinita | D. H. Olson, Vinita | |
| Creek..... | Frank H. Sisler, Jr., Bristow | Carl W. Bowie, Bristow | Second Tuesday |
| Custer..... | Floyd Simon, Clinton | J. H. Tisdal, Clinton | Third Thursday |
| Garfield..... | Byron J. Cordonier, Enid | Roscoe C. Baker, Enid | Fourth Thursday |
| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | Third Thursday |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Greer..... | Van S. Parmley, Mangum | J. B. Hollis, Mangum | |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | First Wednesday |
| Haskell..... | William S. Carson, Keota | C. M. Bloss, Holdenville | |
| Hughes..... | Imogene Mayfield, Holdenville | Ruth Annadown, Holdenville | First Friday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Last Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Monday |
| Kay-Noble..... | D. M. Gordon, Ponca City | C. W. Arrendell, Ponca City | Second Thursday |
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| Kiowa-Washita..... | A. H. Bungardt, Cordell | Aubrey E. Stowers, Sentinel | |
| LeFlore..... | Charles Cunningham, Poteau | G. W. Hogaboom, Heavener | |
| Lincoln..... | U. E. Nickell, Davenport | Ross P. Demos, Stroud | First Wednesday |
| Logan..... | Webber Merrell, Guthrie | Phillips R. Fife, Guthrie | Third Tuesday |
| Maves..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | Ralph Royster, Purcell | W. C. McCurdy, Jr., Purcell | |
| McIntosh..... | F. R. First, Jr., Checotah | W. A. Tolleson, Eufaula | Third Thursday |
| Muskogee-Sequoyah- Wagoner..... | L. S. McAlister, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
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| Oklahoma..... | Onis George Hazel, Oklahoma City | Gerald Bednar, Oklahoma City | Fourth Tuesday |
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| Osage..... | G. W. McDonald, Pawhuska | S. B. Leslie, Jr., Okmulgee | Second Monday |
| Ottawa..... | Rex Graham, Miami | C. S. Stotts, Pawhuska | Third Thursday |
| Payne-Pawnee..... | Howard Puckett, Stillwater | W. Jackson Sayles, Miami | Second Thursday |
| Pittsburg..... | G. R. Booth, Wilburton | C. M. Rippey, Stillwater | Third Friday |
| Pontotoc-Murray..... | E. M. Gullatt, Ada | Homer C. Wheeler, McAlester | First Wednesday |
| Pottawatomie..... | J. N. Owens, Jr., Shawnee | Ollie McBride, Ada | 1st and 3rd Wed. |
| Rogers..... | Roy Melinder, Claremore | F. C. Gallaher, Shawnee | Third Wednesday |
| Seminole..... | J. D. McGovern, Wewoka | P. S. Anderson, Claremore | |
| Stephens..... | A. J. Weedn, Duncan | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Texas..... | Glenn A. Hopkins, Guymon | W. R. Cheatwood, Duncan | Third Wednesday |
| Tillman..... | F. P. Fry, Frederick | Ronald McCoy, Guymon | |
| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | O. G. Bacon, Frederick | Second and Fourth Monday |
| Washington Nowata..... | Felix Adams, Nowata | John G. Matt, Tulsa | |
| Woods..... | John F. Simon, Alva | Mr. Jack Spears, Exec. Secty. | |
| | | C. L. Johnson, Jr., Bartlesville | Second Wednesday |
| | | W. F. LaFon, Alva | Odd Months |

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

LEW WENTZ,

LOVE OF HUMANITY AND MEDICINE

Editorial tributes to Lew Wentz have traveled throughout Oklahoma and across the continent. But the State Medical Association Journal would fall short of its mission if it failed to acknowledge Mr. Wentz's abiding loyalty and support, particularly in the field of orthopedics. More than twenty-five years ago he became interested in crippled children through an orthopedic clinic in Wichita, Kansas, under the direction of Dr. Frank Dickson of Kansas City. In 1925 the Rotary Clubs of Oklahoma established a state society for Crippled Children. At the organization meeting in Oklahoma City Lew Wentz represented the Ponca City Rotary Club. Here he learned of Oklahoma's widespread interest in crippled children and became acquainted with the work already underway at the University Hospital. The society was organized and Mr. Wentz was chosen as treasurer. The charter was issued September 25, 1925.

According to Joe Hamilton, executive secretary, the treasurer underwrote the organization and from the time of its inception to the time of his death, Mr. Wentz paid the executive secretary's salary and guaranteed generous financial support. The December, 1948, report indicated that "he had personally contributed \$152,000 to the program of the society." More important than material support was his personal influence through the people of the state, the medical profession and legislature. The executive secretary of the Crippled Children's Society throughout the years worked under the following instructions from Mr. Wentz. "If there are any questionable expenditures, charge them to my account and then no contributor can complain." Because of this generosity the society has never found it necessary to curtail any worthy project. This account takes into consideration only one of his many charities.

Considering his relationship to the medical profession his Student Loan Fund must

not be forgotten. As often happens philanthropy brings people into close touch with physicians because they work where charity begins and stand ready to serve as middle man between the rich man's money and the poor man's needs without the middle man's take. Physicians and philanthropists have much in common and by combining their interests and their efforts they can make the world a better place in which to live. We recommend the Wentz-way.

"UNNECESSARY HUMAN SUFFERING"

In his three thousand word report President Truman re his 10 year health program stressed compulsory health insurance and indicated that this is necessary to end "unnecessary human suffering."

Even an intelligent layman knows that much of the total load of human suffering is psychological and not in any way connected with physical ills — not amenable to medical care.

Particularly should the layman who has reached the highest office within the reach of the United States citizen be able to appreciate the psychological strain placed upon the citizenry by a profligate government moving toward totalitarian policies with taxes already ten per cent higher than the limit for survival.

The people endowed with average intelligence know that the quickest and surest way to lighten the heavy load of "unnecessary human suffering" is to end the New Deal.

A check of the Federal government's present medical load would show that the mounting neuro-psychiatric phase has long since outstripped the physical. In this country we have moved along with our so-called civilization only to find that sniping bureaucrats are much harder on the nerves than marauding Indians.

How healthful and how helpful it would be if Mr. Truman would show some disposition to clean house and cut costs.

A PROFESSIONAL HAZARD

Again the Journal must call attention to the danger of making calls in out of the way places, red light districts, and other questionable city areas.

Usually general practitioners make house calls day or night without considering possible hazards. Physicians have been taught that the patient comes first and that day or night the sick call should have the green light.

Again attention is called to the fact that the grocer does not get up in the night to open the store because someone is hungry. The banker does not get out of bed and open the vaults because a customer is broke. The lawyer doesn't meet an irate wife at his office in the middle of the night because she wants a divorce, but the doctor goes across the tracks after midnight because the strange voice over the telephone says somebody is sick. A young physician with an enviable future capable of a great service to society recently received such a call at four o'clock in the morning. When he pulled up to the curb looking for the designated street number a man stepped from the shadow into his car, flashed a dagger, demanded his billfold and backed away with his hard earned cash. This young man is too valuable to be uselessly subjected to such hazards. Again we say physicians who make night calls should have police protection.

THE FIGHT MUST CONTINUE

The members of the American Medical profession, collectively and individually, have rendered a valuable service to the American people through the continued fight against compulsory health insurance which would serve as the entering wedge designed to split asunder the whole structure of American freedom.

Let every member of the medical profession gird his loins and put his shoulder to the wheel in order that we may not roll backward into the slough of despair where the profession and the people can only share their ill fate and lament their lost freedoms.

Ernest E. Irons as President of the A.M.A. is professionally and politically sound. With him in the driver's seat in this 1949th year of our Lord and the 99th of organized medicine in America, we may rest assured the reins will be skillfully drawn and reasonably taut. He knows how to use the whip if trouble arises and he can shoot if necessary to protect our professional car-

go—particularly the gold in the priceless package representing the patient-doctor relationship.

THE GRIEVANCE COMMITTEE

The July issue of the Journal carries the new President's very timely letter which deals with this committee. That there is a need for such a committee is most unfortunate. Now that criticism of the profession has become sufficiently acute to make such a committee advisable we should see that it functions without fear and applies appropriate penalties in case of guilt.

The members of the medical profession have served the people long and well. They have served under difficulties and have met them as they came from colonial days down to the present time. Let it not be said that the physicians of Oklahoma are failing in their great mission of mercy. It's easy to make a living in the practice of medicine without offending the high or the low, the rich or the poor. Medicine is a profession, not a money grabbing trade.

THE TULSA MEETING

The presentations before the scientific sections of the fifty-sixth annual session of the Oklahoma State Medical Association indicated a live, progressive, ambitious profession bent on the advancement of medical science in spite of the Federal Administration's avowed purpose of socialization and ultimate destruction of medicine as it should be practiced among free, intellectual people.

Repeatedly the editorial columns have carried references to unfortunate methods and practices employed by certain members of this forward looking Oklahoma profession. Each county medical society should know what its members are doing and be prepared to give counsel and even discipline if necessity demands.

EDITOR TO ENGLAND

Lewis J. Moorman, M.D., editor of THE JOURNAL, sailed June 27 for England where he was scheduled to participate in several medical meetings. He attended the Commonwealth and Empire Conference under the auspices of the British National Association for the Prevention of Tuberculosis and participated in a symposium of the Osler Club of London honoring the 100th birthday of Sir William Osler. Dr. Moorman's paper was on "Osler, The Man". Speaking on "Humanitarians in Medicine, A Way of Life", he also addressed the Royal College of Surgeons. He was accompanied by Mrs. Moorman. They plan to return to Oklahoma City August 15.

SCIENTIFIC ARTICLES

NEWER CONCEPTS OF THE DIGITALIS PREPARATIONS*

ROBERT H. BAYLEY, M.D.

OKLAHOMA CITY, OKLAHOMA

Probably the most important advances in our concepts of digitalis center about the action of the drug. Withering, in 1785,¹ described the use of Foxglove in the treatment of certain types of dropsy. John Ferriar, in 1799, ascribed the beneficial effects of the drug to its action on the heart, the diuretic action being secondary. A century of widespread misuse of the drug followed. In 1897 Cushney,² and later McKinzie and Lewis,³ emphasized the action of the drug as specific in the treatment of auricular fibrillation.

Luten,⁴ in 1924, and Marvin,⁵ in 1927, showed that slowing of the heart rate is not essential to the beneficial action of digitalis in the treatment of congestive heart failure.

A further understanding of our knowledge of the action of digitalis depends upon certain basic principles of cardiac physiology. In 1912, Knowlton and Starling⁶ found that the heart compensated for an increase in load by an increase in the diastolic fiber length. The adjustment is automatic, for when the heart is unable to eject its full complement of blood, a residual quantity remains and supplements the quantity entering the heart in diastole. The increased diastolic volume results in a stronger contraction. In 1927, Starling and Visscher⁷ found that the energy liberated during the heart's contraction was determined at the outset of contraction and was directly proportional to the fiber length existing just before contraction. In 1932, Dechard and Visscher⁸ showed that the total energy liberated in contraction is independent of the work performed and is entirely dependent upon the diastolic fiber length. In 1934,⁹

these investigators found that the failing heart continued to liberate energy in contraction to the same magnitude at any diastolic fiber length as the normal heart. However, the failing heart is unable to convert as much of the energy liberated to useful work. In short, the efficiency of the failing heart is impaired.

Clinically, the problem of estimating changes in the energy liberated by the heart's contraction is resolved into that of estimating changes in the diastolic volume. Transient enlargement of the heart in response to the increased load of exertion is a beneficial phenomena which enables the normal heart to liberate a proportionally greater quantity of energy, an appropriate increase of which is converted to useful work. The adjustment mechanism is quite delicate; for example, the increased venous return occasioned by lying down is followed promptly by measurable increases in cardiac output.

Starling also found that when the heart was forcibly dilated beyond a certain limit, the associated increase in fiber length was no longer associated with an increased force of contraction. In 1922, Wiggers and Katz,¹⁰ working with dogs, found that elevations of venous pressure to between 250 and 300 mm. of normal saline continued to be associated with a proportional increase in the cardiac output. Further increases in venous pressure produced the overstretch phenomenon of Starling in which the output declines and the heart fails. In 1938, Gold and Cattell, working with heart muscle of the cat, found difficulty in overstretching the muscle fibers. Ordinarily, a stretching force greater than the force of systolic contraction was required in order to obtain the overstretch failure. The implications are clear. It is

*Presented at the Third Triennial Medical Alumni Conference, University of Michigan Medical School, Ann Arbor, Michigan, October 2, 1947. Also presented at the Oklahoma County Medical Society Washington Day Meeting, Oklahoma City, Oklahoma, February 21, 1948.

highly probable that only in rare instances can the overstretch phenomenon constitute a factor in clinical heart failure.

In 1928,¹² Chon and Stewart found that digitalis decreased the diastolic volume of the normal dog heart, increased the force of systolic contraction, and at first diminished and often later increased the cardiac output. In 1932,¹³ these investigators showed that a similar action pertains to digitalis on the normal human heart. In 1936, Peters and Visscher¹⁴ showed that the action of digitalis was, in effect, that of increasing the efficiency of the heart muscle; that is, for a given diastolic fiber length, the drug increases the amount of energy converted to useful work. In 1937, Starr and his co-workers¹⁵ found a variable cardiac output after administration of digitalis in normal human beings, in human beings with auricular fibrillation, and in human beings with heart failure and normal rhythm. They observed that digitalis increases the force of systolic contraction and, under the circumstances, the diastolic volume either diminishes or remains the same. They concluded with Peters and Visscher that the consistent action of digitalis is that of increasing cardiac efficiency. In 1938, Gold and Cattell¹¹ working with papillary muscle of the cat heart, confirmed the findings of Cohn and Stewart to the effect that digitalis increases the force of systolic contraction. In addition, they found no action of the drug on resting elasticity. Decreases in diastolic volume in the normal and in the enlarged heart following administration of digitalis had been attributed to a direct myocardial action of the drug by Cohn and Stewart. The matter was further clarified by Kabat and Visscher who in 1939¹⁶ studied the action of strophanthin on the tortoise ventricle. They found no changes in resting elasticity with doses which produced an increase in the force of systolic contraction. But with toxic doses, which produce a decrease in the force of systolic contraction, they found an increase in both systolic and diastolic elasticity, the latter greater than the former, so that the pulse pressure diminished and the heart failed in contraction. They pointed out that the failing mammalian heart shows an increase in resting elasticity with an improved oxygen supply and that the increased efficiency produced by digitalis results in an improved oxygen balance. They suggested that the decreased diastolic volume which often follows digitalis medication is a sec-

dary, rather than a primary, effect of the drug.

We may summarize the modern concept of the action of digitalis as follows:

1. Digitalis in therapeutic doses increases the force of systolic contraction.
2. Under therapeutic digitalization of the enlarged heart the diastolic volume of the heart either decreases or remains the same. In either event the energy liberated per beat is proportional, and since increased force of contraction increases stroke volume, therapeutic digitalization improves the heart's efficiency per beat, whether the cardiac size is diminished or remains the same.
3. The increased cardiac efficiency, induced by therapeutic digitalization, may improve the oxygen balance of the heart muscle. The resting elasticity is thereby increased and the diastolic volume of the heart is diminished accordingly as a secondary effect of the drug.
4. Toxic doses of digitalis produce a decrease in the force of systolic contraction and an increase in the systolic and diastolic elasticity. The useful work accomplished decreases. In addition, various well-known mechanism disturbances occur.

By way of emphasis of the direct action of digitalis upon the heart muscle, reference to an important secondary action of the drug is that of decreasing the heart rate. When the heart is driven by normal sinus rhythm, therapeutic digitalization may in some instances slow the rate of beating. Generally speaking, sinus tachycardia is not by itself an indication for digitalis. If conditions exist which permit digitalis to improve cardiac efficiency and if this effect is sufficiently pronounced to improve the circulation as a whole, heart slowing may occur as a secondary effect. If auricular fibrillation is present, the situation is quite different. In 1918,¹⁷ G. C. Robinson and F. N. Wilson were able to show by cat experiments that digitalis affected the heart beat both indirectly through stimulation of the vagi and by direct action on the heart muscle, and was associated with consistent changes in the final ventricular deflection of the electrocardiogram. The component of vagus stimulation produced a consistent decline in the heart rate and a delay in auriculo-ventricular conduction. In 1939,¹⁸ Gold, Kwit, Otto, and Fox, using patients with auricular fibrillation and a component of heart failure, found that, as therapeutic digitalization

progressed, the decrease of ventricular rate to 70 beats per minute was primarily due to vagus effect. However, they ascribed the vagus stimulation, not to action of digitalis, but to the restoration of myocardial function produced by the direct action of the drug. It is interesting to note that restoration of myocardial function was supposedly obtained at the stage of six-tenths digitalization. The argument centers about the cause of vagus stimulation and heart slowing. The animals utilized by Robinson and Wilson were not in failure and vagus stimulation followed therapeutic doses of digitalis. The rapid ventricular rate of auricular fibrillation is not necessarily due to an increased ventricular response to failure. Many of the highest rates of beating occur soon after the onset of auricular fibrillation when a failure component is not in evidence. The evidence to date appears to support the contention that digitalis has a vagus stimulating action and that early in the course of therapeutic digitalization of subjects with auricular fibrillation, the ventricular slowing which is abolished by atropine is best ascribed to a direct action of the drug. Later, when therapeutic digitalization is complete, atropine produces little or no increase in ventricular rate, and the controlled ventricular rate is then the result of two effects, a direct action of digitalis which increases the refractory period of the junctional tissues, and thus reduces the number of impulses delivered to the ventricles and a decrease in ventricular response to stimuli due to the improved oxygen balance which follows the increased cardiac efficiency provided by the direct action of digitalis on the myocardium. The practical clinical implication is that apparently satisfactory slowing in auricular fibrillation may not be satisfactory at all, for when it depends for the most part on action through the vagi, digitalization is incomplete and the full beneficial effect of the drug on the myocardium is not obtained. Moreover, the slow rate will not be maintained through the many functions which depress activity of the vagi.

THE HEART'S LOAD AND DIGITALIS

Let us define heart failure as an abnormal decrease in the cardiac reserve. In relationship to the indications for digitalization it will be profitable to consider the several mechanisms which operate in disease to bring about a decrease in the cardiac reserve.

An actual or relative increase in the heart's load (particularly if the load increase is prolonged or permanent) if sufficient to produce definite cardiac enlargement is the main criteria for therapeutic digitalization. Whenever the increased load can be removed the indication for digitalization vanishes as, for example, in adequately treated polycythemia vera. A common cause for a prolonged increase in cardiac load is essential hypertension. When the extent of cardiac enlargement is slight, the advantage to be gained by digitalization must be weighed against the patient's ability, in cooperation and expense, to maintain therapeutic digitalization for an indefinite period. The importance of chronic valve lesions in increasing the heart's load is generally overrated. A good myocardium will carry on well with all chronic valve lesions singly and even in combination for many years, and, at the same time, maintain a good cardiac reserve. The notable exception is the lesion of free aortic insufficiency.

If we suppose that half of the myocardium has been destroyed and the remaining half is normal, the load is unchanged; relatively, however, the load has doubled for the surviving muscle fibers. If chronic cardiac enlargement is more than slight due to actual or relative increases in load, there is clear indication for therapeutic digitalization whether or not the stage of congestive heart failure has been reached. The therapy will increase the heart's efficiency, and thus expand its reserve and many of the transient future overloads will actually be avoided. In a particular patient it is possible that the stage of congestive failure may be delayed for a period of several years or longer by digitalization.

Aside from actual and relative increases in cardiac load, there are two additional general mechanisms by which the cardiac reserve may be primarily diminished, i.e., impairment of the energy supply to the heart and impairment of the enzyme system by which the myocardium liberates the energy brought to it. Diseases of the lungs which create anoxic anoxia, and diseases of the blood which produce anemic anoxia impair the energy supply to all tissues in general and to the myocardium incidentally. If the impairment is prolonged and without possibility for relief, digitalization should prove helpful, particularly when greater than slight cardiac enlargement is present. If slight or no cardiac enlargement exists, the need for increased efficiency is slight or

non-existent. In this general category also are diseases which impair coronary flow incidentally and in particular. They deserve further consideration, however, because there are usually localized regions in the ventricular muscle in which the fibers are in an ischemic state of relatively high intensity. Zones of this kind display great excitability which may be aggravated further by the direct action of digitalis. On the other hand, if pulmonary congestion has developed, the anoxic anoxia may be equally as dangerous. Ventricular paroxysmal tachycardia and/or ventricular fibrillation may develop. Under the circumstances, the decision on therapeutic digitalization is not an easy one and there is no rule of thumb. The intensity of local ischemia may often be evaluated nicely by an electrocardiographic study. The intensity of pulmonary congestion is best evaluated by physical signs, chest x-ray, and the vital capacity. If digitalization is carried out in the presence of intense local ventricular ischemia, quinidine is frequently administered concurrently. The combined action of the two drugs on the heart with local ischemia is a problem which merits experimental study. The presence of moderate or more cardiac enlargement is the leading indication for digitalization. No matter how loud the precordium murmurs, and no matter what the mechanism short of high rates of beating, the heart which shows slight or no enlargement has a good reserve and digitalization, if indicated at all, is not urgent.

How digitalis acts to produce the increased force of systolic contraction is not known. The cardiac glycosides enter the muscle cell and are split and the active aglycone is released and produces its effect which is much more pronounced in heart muscle than in other kinds of muscle. Diseases in which the muscle enzyme and co-enzyme system of heart is impaired remain to be considered. They are noted for their complete or nearly complete failure to respond to digitalis. Beriberi heart disease, myxedema heart, probably post-partal disease and vonGeirky's disease, are examples. It has not been shown that digitalization is distinctly harmful in failures of this type. A considerable number of poisons or drugs in toxic doses have this type of destructive action on living cells in general and the heart incidentally. The clinical picture is usually that of central nervous system failure due to the greater sensitivity of this system to hystanoxia.

STANDARDIZATION (*Pharmological Assay*)

One of the chief difficulties encountered in the routine use of the cardiac glycosides is their unpredictable quantitative effect when given by mouth. One of the basic causes of this difficulty was stressed by Peters and Visscher¹⁸ in 1936, at which time they pointed out that the pharmacological assay of digitalis is based on its toxic action, and there is no assurance that its lethal properties in animals are in constant ratio to its useful ones in man. They further offered the potent suggestion that therapeutic agents in general be measured by their action on the essential physiological mechanism for which they are to be employed. In 1941, Gold and Cattell¹⁹ re-emphasized the fact that human therapeutic doses of several of the pure cardiac glycosides are not predictable from animal toxic assay, and in 1942, Gold²⁰ and his co-workers described a method for the bio-assay of digitalis in humans. This work might have been suggested by that of Visscher and LaDue²¹ who in 1941 showed that when the intravenous digitalization dose for auricular fibrillation in man of the different pure cardiac glycosides is converted into molar quantities, the magnitude of the quantities are nearly equal (see Table 1). In two wide exceptions the chemical nucleus differed from the others in structure at the third carbon atom.

In 1944, Gold²² showed that one U.S.P. unit of digitalis leaf might differ in its action in humans by as much as three times one U.S.P. unit of another leaf preparation. In the case of the pure glycosides given by mouth, one U.S.P. unit might differ ten-fold in its action in man from that of one U.S.P. unit of another preparation. In 1944, Gold compared the oral with the intravenous digitalization dose for man of the similar preparations, and found the doses identical for digitoxin but differing as much as five and even ten-fold in other preparations. He pointed out that where the oral and I.V. doses differ for a given preparation, the difference is primarily due to failure of absorption, although destruction and elimination are also involved.

In this same article Gold pointed out that the non-absorbable fractions of a given preparation serve no useful therapeutic purpose and, if present in sufficient quantity, cause local irritation of the gastrointestinal tract. For example, the powdered leaf or tincture are about 1/5 absorbed, and the unabsorbed 4/5 of the quantity utilized to

| Glycoside | Mol. Wt. | Intravenous digitalizing dose for man | | Cat lethal micromols | Configura- tion C ₃ | Sugar |
|--------------------|----------|--|-----------|-------------------------|-----------------------------------|-------------|
| | | mg. | micromols | | | |
| Ouabain | 584 | 1.0 | 1.7 | 0.21 | a-OH | Rhamnose |
| Digitoxin | 764 | 1.2 | 1.6 | 0.43 | a-OH | Digitoxose |
| Lanatoside C | 984 | 1.5 | 1.5 | 0.22 | a-OH | Digitoxose |
| Digoxin | 780 | 1.0 | 1.3 | 0.23 | a-OH | Digitoxose |
| | | 1.5 | 1.9 | | | |
| Thevetin | 858 | 4.2 | 4.9 | 1.06 | B-OH | Digitalose? |

From Visscher and LaDue, Ref. 21.

Table 1. Comparing a physiological assay in man with the lethal assay in cat.

introduce digitalization in the course of a day or two is sufficient to cause nausea and vomiting by irritation of the gastric mucosa at a time well in advance of full digitalization. Once digitalization has been obtained and relatively small maintenance doses are being used, the matter is quite different for the unabsorbed fractions of any of the commonly used preparations is too small to produce nausea and vomiting. The observations have led Gold to recommend the pure cardiac glycoside digitoxin as the preparation of choice. Its complete absorbability simplifies dosage because the oral dose for a given purpose is the same as the intravenous dose, and even when the complete digitalization dose is administered undivided, no inactive components remain in the gastrointestinal tract to produce local irritation, nausea, and vomiting. The peak effect of digitoxin is reached in about six hours. Consequently, the divided doses ordinarily utilized for

digitalization are best given at six-hour intervals. The daily rate of elimination and destruction of digitalis preparations is a proportional function of the dosage.²⁵ Consequently, preparations which have a longer peak action (slower elimination and destruction) will maintain a more nearly continuous state of digitalization on the basis of a single daily dose. Digitalis leaf and digitoxin (see Table 2) are equally satisfactory in this respect. By contrast, it may be noted that a single dose of ouabain is almost completely eliminated in 24 hours and the maintenance daily dose necessarily approximates that of the digitalization dose.

It appears that digitoxin is the preparation of choice primarily because of its one-hundred percent absorption which permits rapid (one day or less), or slow, digitalization without local irritation. Digitoxin has the advantage of relatively slow destruction

| Preparation | Oral Dose mgm. | I.V. Dose mgm. | % Absorb | Peak Action | Duration | Daily Dose |
|----------------|-------------------|-------------------|-------------|----------------|----------|---------------|
| Digitoxin | 1.2-2.0 | 1.2-2.0 | 100 | 6 hrs. | 4 days | 0.1-0.2 |
| Digitalis leaf | 1.2-2.0 gm. | ..... | 20±10 | 6 hrs. | 4 days | 0.1-0.2 gm. |
| Ouabain | ..... | 0.5-1.0 | 0 | 2 hrs. | 1 day | 0.25-0.5 |
| K-Strophanthin | ..... | 0.65 | 0 | 2 hrs. | 1+ day | 0.3 |
| Digilanid C | 10-20 | 1.0-2.0 | 10± | 3-4 hrs. | 2 days | 0.1 |
| Digoxin | 4-8 | 1.0-2.0 | 20± | 3-4 hrs. | 2 days | 0.5 |

D. Purpurea Leaf

- 1. Powdered Leaf
- 2. Tincture
- 3. Glycosides
- Digitoxin†
- gitoxin
- gitalin

Seeds

- 1. glycoside
- Digitalin

D. Lanata

Leaf (glycosides)

— Digilanid A — Digitoxin
Digilanid B — gitoxin
Digilanid* C — Digoxin
(-acetyl group)

Squill

- 1. Scillaren
- 2. Uarginin

Strophanthus

S. gratus
— Ouabain
S. Kombé
— K-Strophanthin
Thevetia nerifolia
glycoside
Thevetin

†Digitaline Nativelle, Crystodigin, Purodigin

*Lanatoside C (Cedilanid)

Table 2. Displaying the more important clinical properties of six commonly used digitalis preparations, together with a list indicating the plant origin of popular preparations.

or elimination which make for smooth maintenance of the digitalized state. In addition, its dosage is simplified by the fact that it acts the same quantitatively when given orally and intravenously. Little action time is saved, however, by the intravenous route, and if the clinical picture is urgent enough to require intravenous medication, ouabain (Crystalline Strophanthin) is the drug of choice. Here ouabain has the decided advantage of peak action in two hours so that the second and third digitalizing doses may follow at two-hour intervals. It will rarely be necessary to administer the total digitalization dose with one injection. When such is the case, it must be ascertained with certainty that no digitalis preparation has been given within the preceding three-week period. When ouabain is used for rapid digitalization, oral digitoxin should be started in such doses and at such intervals as to maintain the rapidly falling digitalization of ouabain. A suggested scale is digitoxin 0.2 mgm. 12, and again 24 hours after the last digitalizing dose of ouabain. Digitoxin 0.4 mgm. is repeated again on the following day in two divided doses six hours apart. The maintenance dose of 0.1-0.2 mgm. is then commenced on the third day of digitoxin medication. Somewhat larger doses may be required on the first and second day following ouabain.

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CANCER GRANTS AID MEDICAL SCHOOL PROGRAM

The University of Oklahoma School of Medicine is one of 74 of the country's 79 medical schools now carrying out cancer training programs with the aid of grants from the National Cancer Institute.

Cancer training grants, which are renewable annually, were first made in 1947 to assist medical schools in coordinating and strengthening their cancer instruction for undergraduates. Medical school grants are limited to \$25,000 for four year schools and \$5,000 for two year schools. Similar grants now aid cancer teaching in 36 of 40 dental schools.

TREATMENT OF SYPHILIS BY ORAL USE OF AUREOMYCIN*

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The appraisal of penicillin in the treatment of syphilis has continued since its use was recommended in 1943 by Mahoney and his co-workers.¹ Considerable information has been accumulated as the result of treating more than half a million patients with it. Penicillin, as you may recall, was introduced while syphilotherapists were in the midst of appraising the intensive methods of giving oxophenarsine hydrochloride (mapharsen). The continuous drip method of administering oxophenarsine hydrochloride for a period of five to seven days had been succeeded by a daily injection procedure for a similar short period, which, in combination with bismuth, was producing a higher incidence of "cure" and likewise a higher incidence of serious and fatal reactions than had been observed from other methods of treatment. Oxophenarsine hydrochloride had been recognized by Ehrlich² in his original investigations but had been discarded because it was found at that time to be too toxic. In small doses, however, given at the rate of 0.04 gm. at intervals of four to five days, it later was found to be less toxic and accordingly had acquired considerable favor over the years. The newer intensive use of arsenic in this form was of considerable moment because its administration for approximately a week was in contrast to its previous use for a period of eighteen months for the satisfactory treatment of early syphilis.

Fever therapy, either by machine or by inoculation of malarial organisms, had been more successful in the treatment of neurosyphilis than any other remedy that had been previously used, but it, too, was a cumbersome procedure, required hospitalization and a large number of patients were necessary to maintain the strain of *Plasmodia vivax*. For years syphilotherapists had been seeking a method of treating syphilis that would be simple to give, effective, less ex-

pensive and less toxic than the procedures available, so that the introduction of penicillin as an antisypilitic agent was accepted wholeheartedly.

Penicillin has been subjected to the most intensive clinical application and statistical appraisal of any remedy employed previously for the treatment of syphilis. This was made possible by the efforts of the National Research Council as part of the war effort, so that in a period of five years thousands of patients have been treated, observed and subjected to follow-up study. In this five-year period much of the therapeutic effectiveness and some of the therapeutic inadequacies of penicillin have been determined. It took 15 years to learn the same facts about heavy metal therapy. Accumulated surveys indicate that approximately 95 per cent of patients in the seronegative chancre phase, 80 per cent of those with positive results of serologic tests of the blood and still in the chancre stage and 60 per cent of those in the late secondary stage of acute syphilis are cured after the adequate use of penicillin. It heals the benign forms of syphilis, such as cutaneous and osseous syphilis, very readily. It reduces the spinal fluid activity in the neurosyphilitic, especially the cell count, but is less effective in controlling the clinical manifestations of neurosyphilis. It has as yet demonstrated little influence on the blood serologic tests of patients with latent syphilis and it is too early to determine its value in the cardiovascular forms of the disease. Undoubtedly the outstanding value of penicillin therapy is in the prevention of congenital syphilis. As a result of these therapeutic accomplishments, the pendulum has swung completely over to penicillin, so that arsphenamine, mapharsen, bismuth, mercury and fever therapy have almost lost favor.

During the five years it has been on trial various methods of employing penicillin have been used, from the original method of giving it by continuous intravenous in-

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jection up to the present when one injection a day, or even two injections a week seem to be adequate in treatment of certain forms of the disease. The first widely used preparation for intramuscular administration which contained penicillin in beeswax and peanut oil, was discarded because the local reactions were unpleasant. This preparation was followed by procaine penicillin, and, more recently, monacetate preparations. Experience has shown that these two preparations produce fewer local reactions while the therapeutic results seem to be equally satisfactory. The intravenous use of penicillin was an effective but difficult therapeutic procedure because it not only required hospitalization but was a tedious undertaking and produced thrombophlebitis to the point at which treatment became impossible.

There is still some debate going on as to the advisability of giving penicillin concurrently with oxophenarsine hydrochloride and bismuth for the treatment of early syphilis and the more resistant forms of the disease. The group of patients with early syphilis that I treated in this way has provided the highest incidence of successful results of any system of treatment I have employed. Similarly, the combination of penicillin and fever therapy for the treatment of the more resistant forms of neurosyphilis, such as tabes dorsalis and general paralysis of the insane, also has been a debatable issue. I have been one of the advocates of using this combination in patients who manifest frank clinical evidence of neurologic involvement.

Several new details have been learned about syphilis as the result of the use of penicillin. Reinfections are now common in patients who have been treated for acute syphilis with penicillin. The explanation is that following a satisfactory course of penicillin, which is given in a short time, reinfection is acquired when the patient is exposed to an infected individual because the penicillin therapy was given so rapidly and the therapeutic response was so quick that the individual does not have the opportunity to set up his immunologic forces against the disease. In fact, reinfections have become so common and clinically confusing that it is now difficult to determine whether a patient has a reinfection or is manifesting evidence of relapse.

Another interesting observation is that patients with acute syphilis in the chancre phase do decidedly better than patients with late forms of early syphilis or, in other

words, the so-called late secondary stage of the disease. I mentioned the fact that in the seropositive chancre phase the incidence of cure approximates 80 per cent, while in the late secondary stage the incidence of cure is approximately 60 per cent. Although these figures compare favorably with the results from the arsenic-bismuth combinations that have been used in the past, this observation tends to dispel the concept that an individual who developed a secondary eruption with mucous patches and condylo-mas was apt to respond more satisfactorily to treatment than was the individual for whom treatment was started early in the course of his infection. The idea that the development of the secondary eruption helped stimulate his defense mechanism does not now prevail because the earlier treatment is started in the acute syphilitic the better are the results. In spite of the fact that the percentage of successful results of treatment with heavy metals and with penicillin are similar, there is no question that penicillin is superior to the older methods, because treatment with it is every bit as effective, it is technically easier to give, it is less expensive and the reactions are less severe than from any of the combinations of heavy metals.

As a result of the use of penicillin in the treatment of neurosyphilis, it has now become very difficult to maintain the *Plasmodia vivax* for inoculation because the number of paretics and tabetics is becoming steadily smaller. It is significant, also, that the number of patients with acute syphilis is likewise becoming increasingly less, so that in many clinics it has become difficult to accumulate a sufficient number of these patients to appraise any new method of treating early syphilis. No doubt the general use of penicillin and the education of the laity and the medical profession have resulted in a marked decrease in most types of syphilis. Because of the rarity, it has taken some years to learn that penicillin is of value for patients with late visceral manifestations, such as hepatic, gastric, and pulmonary syphilis. In certain types of osseous syphilis, such as gumma of the hard palate, penicillin has manifested a twofold effect first, against the *Spirocheta pallida* and the syphilitic process and second against the secondary anaerobic micro-organisms which have been present in these lesions and apparently have caused the persistence of these ulcerative processes in the bony structure of the nose and mouth. In other words,

from an involved, complicated regime of heavy metal therapy with numerous and sometimes fatal complications, a comparatively simple system of treatment with penicillin has been evolved which has offered, up to the present, satisfactory therapeutic effects in most manifestations of the disease.

However, two factors have begun to creep into the picture, which suggest that the future of penicillin in the treatment of syphilis may be questionable. I refer to the sensitizations and the resistance of the organisms that are appearing in increasing numbers and apparently with increasing rapidity. Penicillin has been used for so many conditions and in such a variety of ways, namely by injection, by inhalation, in ointments and by lozenges that the sensitizations have been increasing in a marked degree. The sensitizations manifest themselves not only in local urticarial reactions at the site of injection but in generalized urticaria, vesicular eruptions of the hands and feet and eczematoid reactions. In addition, the resistance that the *Spirocheta pallida* has begun to show to penicillin has caused considerable concern in the minds of some investigators. So much so that it has been thought necessary to begin to employ other antibiotics, new or old, that could supplant penicillin for the treatment of syphilis. At least it has been felt by some observers that another remedy should be available which had been subjected to clinical trial so that its therapeutic efficiency in syphilis is known.

Because of this attitude my colleague, F. Heilman,³ studied the effects of aureomycin in animals into which he had injected various forms of *Spirocheta*. He employed the *Spirochete* of relapsing fever *Borrelia novyi* and that of icterohemorrhagic jaundice in the same manner that these organisms were used when appraising the value of penicil-

lin, in 1943.⁴ He found that the effect of aureomycin was three or four times greater against these particular spirochetes than had been true of penicillin. As a result of his findings, Herrell, Kierland and I^{5 6 7} started to use aureomycin in the treatment of syphilis. We have given the drug orally in doses of 4 gm. a day for a total dosage of from 44 to 90.5 gm. Two patients with early syphilis were treated in December, 1948, and it was found that the *Spirocheta pallida* disappeared from the chancres in approximately 60 hours and that the cutaneous lesions involuted rapidly. Our experience had indicated that the *Spirocheta pallida* on the average disappeared from the chancre in approximately 72 hours following the injection of penicillin. As table 1 shows, the serologic reversals of the blood have been highly satisfactory and complete negativity has developed within a period of four months in both cases. The spinal fluids of both of these patients were completely negative.

Subsequently, we had the opportunity of treating two patients with late cutaneous gummas, and late lesions of the skin are today rare. The appraisal of the therapeutic effect of a remedy for syphilis is evaluated better as the result of demonstrating its healing effect upon gumma of the skin than upon patients with early syphilis or neurosyphilis. My reason for saying this is the fact that the primary and secondary lesions of syphilis involute spontaneously and likewise it is known that repeated examinations of spinal fluid tend to decrease the cell count in the spinal fluid whether or not any medicament is employed. Both of these patients had skin lesions that had been present for six and ten years respectively and the lesions of both involuted (fig. 1) with the same degree of rapidity and completeness that similar lesions have involuted under heavy



b

Results in the treatment of gumma of the forearm: a, before treatment; b, following administration of 47 gm. of aureo-

metal or penicillin therapy. The serologic reversals have not been significant as yet in these two cases, although there has been some decrease in the positiveness of the serologic reports of the blood.

The results of the treatment of neurosyphilis with aureomycin are by no means conclusive, although our experience thus far indicates that in patients who have active infection of spinal fluid in which the cell count is high (in the neighborhood of 100 lymphocytes), the tendency of the cell count to return to normal occurs with about the same degree of rapidity that has been noted after penicillin therapy. We have treated some patients with clinical signs of neurosyphilis but have not as yet been impressed by the effects of aureomycin on the clinical manifestations of the disease. One patient with general paresis of the maniacal type cooled off considerably although not enough to warrant his release from the hospital. Fever therapy was subsequently employed.

In other words, our short experience would indicate that aureomycin when given by mouth has a definite therapeutic effect on patients with syphilis. The complications from its administration have been few and of a mild degree: gastrointestinal upsets with nausea, occasional vomiting and diarrhea have been the outstanding reactions we have noted. It has been possible to minimize these reactions by decreasing the dose and occasionally by giving an interval of two or three days' rest from treatment and then resuming again with smaller doses. I have made mention of the fact that we endeavored to give the patients a minimum of 60 gm. (actually 44 to 90.5 gm. were given) of the drug in a period of 12 to 15 days. This is by no means arbitrary but was the program adopted as a starting point and has been continued because the results have been satisfactory. It has been possible to maintain levels of aureomycin in the blood serum of two to four micrograms per cubic centimeter from the administration of this amount of the drug. Likewise, it has been possible to demonstrate the presence of aureomycin in the spinal fluid in concentrations between 0.06 and 1.25 micrograms per cubic centimeter in both normal and abnormal types of fluids. This is in contrast to penicillin, for penicillin can be recovered more readily from the spinal fluid of patients with neurosyphilis than from others. Equally important has been the ability to recover aureomycin from the blood stream of a new born baby whose mother had been

given aureomycin previous to delivery. This would indicate, although we have not had the opportunity of treating such a patient, that aureomycin might also have the same ability as penicillin to prevent the development of congenital syphilis. Another significant finding is the fact that it is possible to give aureomycin to individuals who have demonstrated sensitivity to penicillin. In other words, it is possible now to treat with aureomycin syphilitics who have become sensitive to penicillin. To date we have noted no evidence of sensitivity to aureomycin.

No doubt there is some question in many minds on the advisability of treating patients with acute syphilis with a drug that they take by mouth at home. No doubt it is true that such a program would probably be unsatisfactory for certain individuals because they would neglect to take the drug. In the syphilis clinics by no means all patients with acute syphilis with a drug that penicillin and certainly it was the experience that not all patients completed a course of heavy metal therapy when that was in vogue. Although the incidence of completion of treatment has been much higher with penicillin than with heavy metals, there still is a lapse of treatment in approximately 10 or 15 per cent of cases in various clinics. No doubt there is a group of patients as well as physicians who would welcome a method of treating syphilis by mouth. The use of an oral remedy for treating syphilis has far-reaching economic effects, because it will require less time on the part of the patient to attend clinics, it will require less clinical help and materiel and should in a short time be the least expensive agent for the treatment of syphilis that has been developed.

This is a preliminary report and will need confirmation by other syphilotherapists of a large group of patients manifesting various types of syphilis. There no doubt are reactions and features of this program at present unknown, perhaps some which have not been encountered from previous therapeutic agents, so that at least five years of treatment and observation will be needed before it will be justifiable to class it as a satisfactory treatment for syphilis. Perhaps the oral administration of a drug is not the ideal way of treating some clinic patients as a routine method, but there certainly are many patients with syphilis who would welcome such a treatment.

SUMMARY

Aureomycin has been shown to have a satisfactory therapeutic effect on patients with early syphilis, and those with late skin syphilis. The results in neurosyphilis are less pronounced but are encouraging.

The reactions consist of nausea, vomiting and diarrhea.

Evidence of sensitization from it has not as yet been noted.

Oral treatment of syphilis with aureomycin is less time consuming to the patient, requires less clinic help and material, is mildly toxic and will no doubt become rather inexpensive in the near future.

Table 1

RESULTS OF TREATMENT WITH AUREOMYCIN IN 2 CASES

| Case | Duration of treatment | TEST | | | | Quantitative titer |
|------|-----------------------|----------|----------|----------|---------------------|--------------------|
| | | Kline | Kahn | Hinton | Wassermann (Kolmer) | |
| 1 | Before treatment | 4+ | 4+ | Positive | Strong pos. 44 | 256 Kahn units |
| | 12 days | 4+ | 4+ | Positive | Strong pos. 44 | 128 Kahn units |
| | 40 days | 4+ | 4+ | Positive | Positive 23 | 32 Kahn units |
| | 72 days | 1+ | 1+ | Doubtful | Negative | |
| | 103 days | Negative | Negative | Negative | Negative | |
| | 136 days | Negative | Negative | Negative | Negative | |
| | 172 days | Negative | Negative | Negative | Negative | |
| 2 | Before treatment | Negative | Negative | Positive | Negative | |
| | 7 days | 3+ | 4+ | Positive | Strong pos. 44 | 8 Kahn units |
| | 14 days | ± | 3+ | Positive | Strong pos. 44 | 3 Kahn units |
| | 23 days | ± | Negative | Positive | Strong pos. 44 | |
| | 38 days | Negative | Negative | Doubtful | Negative | |
| | 54 days | Negative | Negative | Doubtful | Negative | |
| | 66 days | Negative | Negative | Negative | Doubtful | |
| | 95 days | Negative | Negative | Negative | Negative | |
| | 129 days | Negative | Negative | Negative | Negative | |
| | 173 days | Negative | Negative | Negative | Negative | |

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TWENTY-FIVE YEARS AGO

(From Our Early Files of Editorial Notes — Personal and General).

Dr. S. P. Ross, Ada, has been appointed Chief Surgeon for the Oklahoma City and Atoka RR with headquarters at Ada.

Dr. and Mrs. R. W. Williams, Anadarko, returned last month from a month's vacation in the north, including a trip to Montreal.

Dr. and Mrs. William H. Bailey, President of the Oklahoma County Medical Assn., are spending the summer vacation at Denver, and will visit California.

Oklahoma County Medical Association enjoyed a picnic at Lincoln Park, recently, followed by a swim in Northeast Lake. About one hundred persons attended.

Dr. and Mrs. H. T. Ballantine, Muskogee, are on an extensive trip through the Northwest and Canada. They will visit Yellowstone, Canadian Pacific points, Lake Louise, Banff and other western and Pacific points.

Garvin County Medical Society met and banqueted at Pauls Valley recently, a feature of the meeting being an address by Dr. Curt Von Wedel, Oklahoma City, on Plastic Surgery, several clinical cases being presented.

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CONTACT DERMATITIS*

W. A. SHOWMAN, M.D.

TULSA, OKLAHOMA

The most common skin disease encountered in private or clinic practice is contact dermatitis. It is also known as dermatitis of external origin or dermatitis venanata. The preferable designation is contact dermatitis. Confusion exists regarding eczema and dermatitis but the separation into a different classification should be strictly adhered to. Eczema is generally accepted to be a dermatitis of unknown etiology, while dermatitis is an inflammatory reaction of the skin whose cause is proved, although it may be difficult to identify. No difficulty should be encountered in the recognition of contact dermatitis when an acute or chronic inflammatory dermatitis is present, and associated with a history of substances reaching the skin from the outside. The reaction produced by chemical substances may present many morphologic forms in an individual whose threshold of sensitivity has been altered or whose skin has been injured by a primary irritant.

Chemical substances which contact the skin produce a reaction either by their primary irritating qualities or through the process of sensitization. The hypersensitive eczematous type will account for the majority of the cases of contact dermatitis. A single exposure in either type may be sufficient to provoke a reaction but repeated or continuous contact is the usual process.

Contact dermatitis is an inflammatory cutaneous reaction which is produced by same chemical substance or substances reaching the skin from without. The process may be acute, subacute or chronic, depending upon the character of the substance and the repetition of the contact. Reactions vary in the manner of their appearance. Some may occur within a few minutes after the exposure while some may be delayed hours, days and weeks. All degrees of an inflam-

matory re-eruption action from a simple hyperemia to gangrene may be present depending upon the individual reaction and the character of the primary irritant. Subjectively the first symptom is itching, although burning may be the symptom when the contactant is a primary irritating substance. Within a comparatively short time an erythematous reaction is visible. The reaction may be limited to the areas of contact or may be spread rapidly to other areas by conveyance with the fingers or clothing. The dermatitis produced by poison ivy is a good example of this type of reaction. Subsequently the lesions become papular, vesicular and in some instances bullous, usually during the early phase of the reaction there is an associated edema producing considerable distortion and discomfort with anxiety. Secondary infections, either pyogenic or mycotic, may complicate the reaction. Pustulation is frequently a secondary reaction in contact dermatitis, also cellulitis. The itching sensation produced by the irritant induces trauma usually thru scratching or rubbing and is responsible for the invasion of the skin with the secondary pyogenic organism. Superimposed upon the original reaction, and at times the secondary infections, there is a complicating insult from the topical application of irritating medications. The injudicious use of the sulfonamides, penicillin, streptomycin and other antibiotics in contact dermatitis is too frequent. The recourse to some of the older methods is preferable. If the eruption is the result of a single contact the process will become self-limited and will usually disappear spontaneously within a few days or a week. The response to appropriate treatment is prompt. Repetition with the contactants is more often the case, and results in aggravation. Continuous and repeated exposures result in the chronic phase of the dermatitis, which is characterized by scaling,

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 16, 1949.

fissuring hyperpigmentation thickening with lichenification. In some instances the process may become universal producing a generalized exfoliating dermatitis.

The recognition of a dermatitis produced by contact is not always a simple procedure because the eruption may simulate many other dermatological conditions; however as stated by Sutton¹ a diagnosis is proved by the cure of the disease when the agent is completely avoided and identification of the agent by a positive reaction to it. A careful and detailed history is essential for the proper recognition of contact dermatitis and in my opinion supersedes all other forms of investigation. Meticulous, systematic questioning of the patient will enable the examining physician to form an opinion whether the problem of a simple removal will suffice, or should there be an extensive detection process instituted. Obviously if the history reveals a recent trip into the woods, a fishing trip or gardening, the probability of weeds and grasses is very probable, whereas if the history reveals the use of a new garden spray, fly spray or related chemical substances, these may be the offenders. The recent inclusion of DDT in both household and garden sprays has been responsible for contact dermatitis among the users. Often suggestive leads, especially directed to the location of the dermatitis, will result in valuable information and help to establish an early identity of the offending contactant. The majority of the patients are unaware that their dermatitis is from an external source and are chiefly concerned with systemic conditions, more often foods and "acid conditions."

The removal of the irritant with resulting cure of the dermatitis is diagnostic, however the simplicity of this statement is overshadowed by its impractical application. Recourse to other methods essential to establish a diagnosis is essential. The use of the patch test is of decided value in the diagnosis of contact dermatitis though it is not without danger and disappointment. This diagnostic procedure is the application to the normal skin of the suspected material in the recommended concentrations. The patch test properly performed with the recommended dilutions and the correct interpretation of the reaction will confirm the guilt of many suspected substances. It should not be performed in an acute fulminating dermatitis or any extensive involvement until there has been an abatement of the dermatitis. A positive patch test will

help to confirm the diagnosis but a negative test does not eliminate the suspected chemical substance. The performance of the patch test narrows down the number of suspects and concentrates attention on the suspicious offenders. Its use in industry is of considerable importance because it not only helps the employees but may prevent others from being affected. In some industries the use of the patch test for pre-employment examination is essential. The use of the usage test has been found to check and help interpret the reactions obtained in the patch test.

The location of the disease on various areas of the skin is of extreme importance in the recognition of contact dermatitis and is frequently so characteristic that a causative diagnosis can be made. The face, including the eyelids, peri-ocular, peri-nasal, peri-oral and chin regions, is often involved in a secondary contact reaction. Too, the anal and peri-anal and genitalia are frequently the site for this reaction. The possibility that of clothing containing the irritating substance, such as the oleresins from the ivy plant, must be considered. Some persistent contact weed or plant dermatitis may be traced to such items as shoes, gloves and jackets. The neck is subjected to reactions from many irritants other than those which frequently produce a dermatitis on the face. A few common reactions are produced by dresses, collars, furs, scarfs, jewelry (especially costume jewelry which has had a coating of clear lacquer) and perfumes. The latter is often encountered in the post-auricular area as hyperpigmentation and is more commonly called "Berlock" dermatitis. Occasionally the lobe of the ear will be the site of a contact dermatitis either from the metal or the lacquer on the ear bob. Chronic eczematoid dermatitis of the external auditory canal should arouse one's suspicion that the process might be contact in origin. Not infrequently the causative factor may be nail lacquer, lacquer on bobby pins or hair pins acting as a secondary contact, but reaction from drugs is much more frequent. Clothing, chiefly nylon, rayon, drugs, and conveyance reactors localize the dermatitis in anal, peri-anal, genitalial, thighs and buttock dermatitis. The dermatitis appearing on the hands in both sexes comprises a detailed study and only a brief consideration will be considered. An excellent survey of the various type patterns which are produced by contactants occurring on the hands has been reported by Waldbott.² Exclusive of the con-

tact dermatitis in industry which is encountered on the hands, the domestic occupations, chiefly that of the housewife with her varied activities account for the majority of these reactions. The more common irritants which are responsible for these hands reactions are soaps, scouring powders, household solvents such as gasoline, turpentine, and naphtha, waxes, paints, varnishes, polishes and foods. Occasionally the plastic steering wheel will produce a dermatitis of the hands and by conveyance with the fingers produce a secondary contact dermatitis on the face. The handling of foods localizes their reaction most frequently to the hands, but also acts as a secondary contactant. The more common foods which produce a dermatitis are celery, carrots, oranges, limes, lemons and not infrequently the artificial dyes on the rind. Causative agents of contact dermatitis with localization on the forearms, are produced by clothing, leather, plastic wristbands, alkali powders, laquer and upholstering material.

The location of a contact eruption as an aid in the diagnosis is of importance when the process involves the feet, and lower extremities. Considerable confusion exists when an inflammatory reaction appears on the feet because of its association with a mycotic infection. There should be no difficulty in differentiating from mycotic infections if the lesions are located where friction, or tight contact with the shoe occur, especially the dorsum of the toes, foot, and instep in contrast to maceration between the toes, or on the plantar and flexor surfaces of the toes. Irritants common to this location on the skin are leather from shoes, linings, dyes, hose, plants, weeds and drugs. The lower extremities are often the site for such irritants as weeds, grasses, dust, oils, azo and paraphenylenediamine dyes in the hose especially nylon, rayon and the sizing in cotton clothing. Lesions which appear on the trunk are significant in their patterns and more often result from clothing, chiefly undergarments containing silks, rayon, nylon, rubber, metals and dyes. The characteristic location for a dermatitis from the rubber in a brassiere strap should arouse the examiner that a contact from the garment produced the dermatitis.

The scalp offers greater resistance to contactants yet preparations used on the scalp in form of tonics, dyes, wave solutions, oils, nets and shampoos act as a source for the secondary contact eruptions appearing on

the face seldom producing a primary scalp dermatitis.

It is apparent from the preceeding remarks that more than some consideration must be given to each individual who presents a contact dermatitis if a correct diagnosis is to be made. Also, as previously stated, the process may simulate other dermatological conditions. Contact dermatitis of the hands and feet is the source of considerable confusion with mycotic infections, infectious eczematoid dermatitis, eczema, drug eruptions, pustular eruption, recurrent vesicular eruption on the hands and occasionally a sensitivity to an ingested food. The characteristic interdigital maceration with flexor involvement on the toes, and fingers which present an erythematous vesicular eruption are most always of contact origin. Nummular lesions which appear on the hands, most probably of virus origin, confuse the picture. These lesions are distinct, only slightly erythematous and more discrete than the lesions of contact dermatitis. The peripheral spreading satellite, folliculo-erythematous pustular lesion of an infectious eczematoid dermatitis is often misleading and is confused with a dermatitis of contact origin. Eczema, recurrent pustular, vesicular eruptions of the hands usually present sufficient individual characteristics to establish their identity. Consideration to causes other than contact must be given when there is a history of protraction.

The successful management of contact dermatitis will depend upon the recognition of the causative contactant and its removal. If this can be affected, if there are no complicating mycotic or bacterial infections and if overtreatment dermatitis has not been superimposed, the eruption will subside rapidly. During the acute ascending phase of the eruption there is no substitution for the continuous moist compresses either by the open or closed method. The best results are obtained with starch, boric, aluminum acetate, or potassium permanganate solutions. In the presence of considerable exudation it is preferable to avoid the powdery lotions because they form a thick crust which may lead to secondary infections. In some instances the combined method is of value, especially if the process is papular and intensely pruritic. Local applications of the sulfonamides, penicillin and streptomycin, which are of value in the specific pyogenic skin infections have no beneficial effect on

acute inflammations and may sensitize the individual so severely that a diffuse, weeping eczematoid dermatitis develops.

In the chronic thickened eruptions, pastes and ointments containing tar are of value, but recourse to physical agents are more often indicated. X-ray therapy in the selected cases of the lichenified and chronic type is of extreme value, even after the removal of the contactant.

Various claims have been made for the

antihistamic drugs, both internally and topically, but in the majority of instances their effectiveness is of minimal value. The administration of other drugs internally should be a satisfactory procedure when judiciously prescribed.

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MEET OUR CONTRIBUTORS

Paul A. O'Leary, M.D., Rochester, Minn., another guest speaker, wrote "Treatment of Syphilis by Oral Use of Aureomycin" in this issue. In 1915 he was graduated from Long Island College of Medicine, Brooklyn, New York. His specialty is dermatology and syphilology and is certified by that board. He is a member of the following organizations: American Academy of Dermatology and Syphilology, American Dermatological Association, Pan American Dermatological Association, American Association for the Advancement of Science, Committee and Sub-committee on Pharmacy, National Advisory Health Special Consultant, Division of Venereal Diseases, USPHS Council, Sigma Xi, Alpha Kappa Kappa and others. He is past chairman of the section on dermatology and syphilology, A.M.A., and past president of the American Academy of Dermatology, American Dermatological Association, Chicago Dermatological Association and others. He is chief editor of Arch. Derm. and Syphil.

Berget H. Blocksom, M.D., Tulsa, wrote "The Retropublic Approach to Prostatectomy". He was graduated from the Duke Medical School in 1934 and practiced in Rockford, Illinois from 1937-1940. He was in the army from 1940-1945, where he held the rank of major in the medical corps. He limits his practice to urology.

Robert H. Bayley, M.D., Oklahoma City, who has a paper appearing in this issue was graduated from Emory University, Atlanta, Ga. in 1931. On the staff of the University of Oklahoma School of Medicine, he has also taught at the University of Michigan, and Louisiana State University School of Medicine. He is a member of the American College of Physicians, Southwestern Clinical Club, American Heart Association, American Association for the Advancement of

Science, Society of Experimental Biology and Medicine and Sigma Xi. He has been certified by the American Board of Internal Medicine.

Hervey A. Foerster, M.D., Oklahoma City, wrote "Non-Venereal Diseases of the Male Genitalia" appearing in this issue. Graduating from the University of Oklahoma in 1927 he limits his practice to dermatology and syphilology. He is a member of the American Academy of Dermatology and Syphilology, Southern Medical Association, Consultant to the Oklahoma State V.D. Hospital, Will Rogers Field, Oklahoma City, and is a Diplomate of the American Board of Dermatology and Syphilology.

W. A. Showman, M.D., A.B., Tulsa, is the author of "Contact Dermatitis" in the August Journal. Dr. Showman was graduated from the Washington University School of Medicine in 1921. Limiting his practice to dermatology and syphilology, he has been certified by the American Board of Dermatology and Syphilology. Vice-president of the Tulsa County Medical Society, he practiced in St. Louis before coming to Tulsa. He is a member of the Southern Medical Association and the American Academy of Dermatology.

C. Charles Burlingame, M.D., Hartford, Connecticut, one of the guest speakers at the annual meeting, has a paper on "Psychiatry and Medicine—One Road Ahead" in this Journal. Dr. Burlingame limits his practice to psychiatry and neurology, and is certified by the American Board of Psychiatry and Neurology. He was graduated from Illinois General Medical College in 1908. Well-known as a writer, editor, and lecturer, he is listed among "Who's Who in America".

MATERNAL MORTALITY DOWN

Final tabulation of births and maternal deaths for 1947 by the National Office of Vital Statistics is graphic proof that medicine under free enterprise is giving the American people the finest health care and the highest level of health of any major nation.

Births and maternal deaths for 1947 indicate a new record low maternal mortality

rate of 1.3 per thousand live births in the U.S. — the lowest reported by any nation and a 79 per cent reduction since 1933, when a rate of 6.2 placed the U.S. eleventh among leading nations.

Oklahoma's rate of 1.7 for 1947 compares very favorably with the state's 1933 average of 6.5.

PSYCHIATRY AND MEDICINE - ONE ROAD AHEAD*

C. CHARLES BURLINGAME, M.D.

HARTFORD, CONN.

Today psychiatry functions as an integral, indispensable part of the great field of medicine, which has divided itself during the past few decades into many specialties devoted to the various areas of sickness and disease. This is a matter of considerable satisfaction to me because I have seen it happen during my own professional lifetime.

Forty-one years ago, when I entered the field of psychiatry, which was even before the word, psychiatry, was coined, the institutions then housing the mentally ill were reminiscent of a feudal system, separate from medicine, even separate from the community. Even the members of the personnel were hardly a part of the community. We psychiatrists-to-be were called 'alienists' by other medical men, and it was rare indeed that another medical man visited our austere institutions.

The attitude of the public was that the mental patient had been 'put away'. Only too often he was looked upon by his family as having gone to the more or less strange world of the insane, from which he would probably not return. If, by chance, he did return, he encountered great difficulties in ever again becoming a member of society as he had been before. In a way, society regarded released patients as *mental lepers* who were not to be relied upon or trusted and were seldom allowed to mingle freely in society.

Because of this lifelong penalty, and because of the stigma associated with mental disease in general, the fact that a person had been mentally ill or had been confined to a mental hospital was a secret closely guarded by the patient himself and by the members of his family.

In those days, our difficulties were many, and often seemingly insurmountable. Not only did we suffer the antagonism of the rest of medicine; we were faced with the indifference, oftentimes the fear, of the public, as well as the awesome immensity of the unknown in our chosen specialty.

We had very little to start with except the courage of our own conviction that the patients in the psychopathic hospitals were sick people as deserving of medical attention as were the victims of smallpox, pneumonia, tuberculosis, or any other of the known physical afflictions of mankind. This attitude was not shared by the rest of the medical profession, who looked upon mental disease as being outside the sphere of scientific medicine.

Today the whole picture has changed. There are now some 5,000 medical men in the United States devoting their lives exclusively to mental and nervous diseases, and another 5,000 are being trained for the specialty.

Medical schools throughout the country are developing departments of psychiatry as rapidly as they can secure qualified psychiatrists for their faculties.

Of the more than a million hospital beds in this country, 600,000 are devoted to the care of nervous and mental diseases, and the men in private practice have their offices filled.

With mental disease now being treated like other diseases, some institutions are accomplishing a percentage of sustained recoveries that have comfortable parallels with the records of medicine and surgery. For instance, at one institution of which I have intimate knowledge, it is fully expected to return to society 85 to 90 of every hundred patients who come for treatment.

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 16, 1949.

Along with the attitude of the medical profession, the public attitude has undergone a transformation. It has become something of the fashion to have some sort of psychiatric ailment. Some people jokingly say that psychiatry is becoming so popularized that emotional difficulty is considered an indication of high breeding and social amenity. Quite different from the early days, when it was a skeleton in the family closet!

What happened between these two periods to bring about such a change in the status of psychiatry, and why did it happen?

I could discourse for many hours in answering that question, but briefly, one of the things that happened was the First World War, at which time the emotions were first recognized as being vital to the effectiveness of the American Army and Navy and those of our Allies.

The exigencies of the times brought forth with a jolt the realization that man's emotional drives and his incapacities are too important to be ignored in the hard, ruthless, and exorbitantly expensive business of prosecuting a war. That sudden awakening of realistic military men, and the subsequent introduction of psychiatry into our military ranks, was one of the turning points of American psychiatry.

Twenty years later came the Second World War, when we discovered that more men broke down from psychiatric conditions than from wounds and the so-called physical illnesses together. The second world conflict demonstrated vividly for the second time that we could no more neglect psychiatry and win than we could neglect typhus, cholera, or any of the other scourges of a fighting force.

Psychiatry was jettisoned from obscurity to fame. Popularity was ours overnight, and waves of public interest have kept pace with spectacular advances in psychiatric treatment and newly developed psychiatric techniques.

Having just been accepted into medicine, the temptation was to rush out to conquer other worlds. The realization that the emotions play a vital part in all of man's life opened all doors to psychiatric exploration. Psychiatrists were called upon to help solve the riddles of politics and the problems of race prejudice, to say nothing of the box-office problems of filmdom. Almost before we knew what was happening, psychiatrists found themselves cast in the role of univer-

sal specialists, doctors of all social and economic ills.

This is tantamount to expecting psychiatry to act as the ruling force in all fields of human thought and endeavor, which of course it is not equipped to do. Without a doubt, psychiatry has a contribution to make to disciplines other than itself, but that is true of almost every scientific discipline, and certainly it is true of medicine. All of medicine is, in a sense, a universal specialty. Medicine has contributed to the progress of sanitation in the meat industry and the handling of foodstuffs; medicine has contributed to architecture in the interests of more healthful living; and so on.

These are important contributions, and by the same token, it is important for psychiatry to make its specialized knowledge available to all forms of human endeavor, but our primary responsibilities lie in the field of medicine — in the understanding and treatment of disease, in getting the individual sick person well, and preventing the individual from getting sick. Out of daily clinical work there is being formed a comparatively undramatic hard core of psychiatric fact from which these ancillary functions of psychiatry may stem.

Experience has shown that diseases of the body will produce a change in the patient's psyche and emotional patterns, and conversely, that psychological disturbances can be contributing factors in causing physical incapacities. Primarily, and specifically, psychiatry is that specialty of medicine that deals with the psychic disturbances, their causes, their psychological manifestations, the physical accompaniments of psychic disturbances, and the psychological and physical treatments of those disturbances.

This is a large order. To be able to fill it entirely, we still must learn a great deal, but notwithstanding the long way there is yet to go, psychiatry today, with the existing accumulation of scientific psychiatric fact and realistic psychiatric philosophy, stands ready and able to deliver as a hard-headed branch of medicine in treating the individual patient.

The present-day psychiatric attack upon mental diseases is four-fold, and I mention its four complements in the following order without necessarily indicating their degree of importance.

1. SOMATIC MEDICINE. Psychiatrists must use all of somatic medicine. It is a well-established fact that every disease has

psychological accompaniments, and I believe it is equally true that every disease worthy of the name also has a somatic recording. I have long been convinced that a better understanding of the human mind will be found through a better understanding of the human body, because the body is the vehicle of the mind.

At the Institute of Living, with which I am associated, an exhaustive physical examination involving eleven specialties is given to each patient. In one of our studies, we were most interested to find that some 60 percent of the patients showed a somatic deviation. This should not be taken to imply that the somatic deviation is the cause of the psychiatric condition, or even necessarily contributing to it, but when out of 1013 cases admitted in one year, eight brain tumors are identified, with confirmation of six on the operating table, we must accept the thesis that a sound working knowledge of somatic medicine is essential in psychiatric treatment.

I recall one patient who came to me from this part of the country. She had the classical symptoms of schizophrenia, but atypical symptoms of pellagra, and treatment of the pellagra was followed by a spectacular recovery from the schizophrenia. I can also recall many cases of anxiety neuroses and depressions who had to be treated in a psychiatric institution and who were relieved simultaneously of their psychiatric symptoms with treatment of cardiac and cardiovascular disease.

2. SOMATIC MODALITIES PECULIAR TO PSYCHIATRY. Secondly, primarily as an aid in treating emotional disorders, there have been developed certain somatic modalities, such as the shock therapy, psychosurgery, and certain of the chemotherapies, which have proved of value in treating psychiatric disorders.

I do not believe that anyone has even a sound hypothesis as to why shock therapy produces improvement, and I do not believe that shock therapy is in itself a specific. However, it has served, on a purely empirical basis, to break up unsatisfactory emotional patterns, and to open the way more readily for the application of all other psychiatric procedures. As such, when used with specific indications, shock therapy is an important tool in the psychiatric therapeutic equipment.

In the field of psychosurgery, the brain operations are directed at lessening tension,

anxiety, intractable pain, fear and self-concern. It was evident in the beginning that at least two things were needed. One was a better knowledge of what is actually cut in the brain, and the other was a better selectivity of patients.

In the beginning, patients were selected for operation on the basis of such poor prognosis that they had nothing to lose anyway, but with experience and the development of new techniques, there is emerging a knowledge of which patients should be operated on and which left alone, and what results may be expected.

I might interpolate here that whatever may be the future of psychosurgery, it is already evident that like shock therapy, the operation itself is not a specific in psychotic cases. It demands an immediate intensive postoperative program of reeducation which is aimed at acceptable social and vocational performance of the patient.

Incidentally, it is with a great deal of interest that I am following experiments along the line of effecting a lobotomy without the use of a knife and without opening the skull. If this technique evolves successfully, it may be another of the fabulous advances in psychological medicine.

In addition to these somatic modalities and the chemotherapies, we have packs, baths, and massage, to say nothing of the impressive work being done in fever therapies. We have penicillin, sulfa drugs, endocrine and the other biologics, electronarcosis, narcotherapy, vitamins, and so on, each an indispensable part of modern psychiatry. The number of somatic modalities well established and in daily use in psychiatry are without end, and I look forward to multiple new ones coming to our aid in the future.

3. REHABILITATION AND REEDUCATION. Besides somatic medicine and the somatic adjuvants, psychiatrists have developed methods of rehabilitation and reeducation as the vehicle on which all other forms of psychiatric therapy are carried to ultimate success of treatment, which is the return of the patient to society as a successful, acceptable member of his community.

In this sphere, I have long thought of man as sitting on a 'four-legged chair of mental health'. One leg of that chair is his *vocation*; every person in society must be able to hold down a job, or otherwise to carry some responsibility. The second leg of the chair is his *avocation*; most people

have a need for pursuits that will absorb their skills and interests that are not absorbed by their jobs or vocations. The third leg of the chair is the man's *social and recreational relationships*; man is a social animal in need of social and recreational outlets; he needs to understand other people and he needs to know how to get along with them; 'man cannot live unto himself alone'. The fourth leg of the chair is the *physical educational sphere of life*; every human being must have good physical educational practices and good habits of personal hygiene. And the back of this chair of mental health might be represented as the individual's '*will-to-do*' or his *emotional drive*.

The person who has all four legs of his chair well-developed and of an appropriate length, and has a good solid back, is well-protected against the possibility of an emotional breakdown. Some persons may get along with one defective leg, or even two, or even a wobbly back if it is not too wobbly, but inevitably, in patients with emotional difficulties, we find some degree of disruption and difficulty in one or more of these particulars. And lack of attention to these factors in treating the patient with emotional difficulties leaves doubtful promise that the patient will remain well.

So it is that one of the basic considerations in the prevention or treatment of any psychiatric condition is the study and development of the individual's vocational potentialities, or the vocational readjustment of the individual.

Secondly, we must develop the person's avocational interests along lines that will be practical for that individual patient.

Thirdly, we must study the person's recreational habits and potentialities and, if necessary, develop these attributes so that he can become a more successful social animal.

Fourthly, we must concern ourselves with the study and correction of poor or indifferent practices of physical hygiene and physical exercise. The need for this, of course, is self-evident to every practitioner of somatic medicine.

Fifthly, we must examine the person's '*will-to-do*' and his emotional life. Much of this is now being done by the men in physical medicine who are deeply interested in their patients, but it is in this particular field that the psychiatrist is preeminently equipped to serve because of his penetrating

and specialized knowledge of the human emotions.

Therefore, no matter what our other forms of therapy may be, we must see to it that this chair of healthful, secure living is made available for each of our individual patients, whether that patient be in or out of a hospital, in or out of the home, or is being cared for on the basis of office practice.

We must meticulously avoid boondoggling in our rehabilitation prescriptions for our patients. I doubt the value of the raffia basket and the woven rug in the field of psychiatry unless it can be clearly demonstrated that the patient will naturally and normally pursue the raffia basket and the woven rug after he leaves the psychiatric institution or the psychiatric therapist.

All of our rehabilitation programs must be conceived as purposeful and practical to the individual when he is restored to competitive society. It must be directed toward that end, for things that will not be of value outside the sphere of psychiatric care may be *desocializing* rather than *resocializing*.

4. PSYCHOTHERAPY. There remains the last complement of modern psychiatric practice, psychotherapy, which, regardless of its form, is essentially personal tutoring in the art of living.

Psychotherapy is that all-important, indispensable department of psychiatry which involves determining the emotional problems that are an integral part of a patient's illness, as well as helping the patient to meet or liquidate the problem and to develop a philosophy of life that will enhance his well-being. It is in the field of psychotherapy that psychiatrists, because of the depth and penetrating quality of their knowledge, are preeminently qualified to assist all the other branches of medicine.

There are many schools of psychotherapeutic thought, which I consider one of the happy circumstances of the day. It is an old and true saying that out of honest differences of opinion comes progress. It is equally true that a good psychotherapist is his own best tool, and he will succeed in crystallizing in his own philosophy the essence of all schools of thought.

The goal of all psychotherapy is to help the patient to understand himself better and to meet life more capably, to help him to become, through the development of his personality, a more successful and enduring member of society.

These four complements of psychiatry's attack on disease embrace the broad picture of psychiatry as a medical specialty. And while psychiatry has many enthusiasts and many applications, it is beyond question a specialty of medicine with a medical foundation. Its lot has been cast irrevocably with scientific medical advancement from which it must never be separated.

I am very disturbed, however, at much of the publicity about psychiatry that endures at the present time. Even though the psychiatric profession as a whole may not be responsible for this publicity, I believe that if it is not stopped, it may cause the men in other branches of medicine to look askance at the psychiatrists themselves. The time has come for all of us in medicine, and psychiatrists in particular, to raise our voices in protest against this publicity to the end that we may endure in the public mind as doctors of medicine and part and parcel of the medical profession.

If we could apply the term schizophrenic, which means a split personality, to this psychiatric publicity, we could say there is today a perfect case of 'schizoid publicity' in which we are going two opposite ways at the same time.

When the great gush of popularity broke upon psychiatry, two facts were glaringly evident. One was that the emotions played a vital role in making people happy or unhappy, or well or sick, and that emotional disorders were the greatest public health problem of our day. The other was that many conditions in our public psychiatric institutions needed correction.

And so, in the forthcoming flood of literature on the subject, the people were warned, 'These are the facts about your emotions. If you have any of these symptoms, you need a psychiatrist. In fact, to keep your mental health, you must see a psychiatrist.'

As a result, hordes of persons were instilled with the belief that they needed psychiatric assistance.

But then, sardonically enough, they were

told, 'There are not enough psychiatrists to go around. There are only 5,000 psychiatrists, and to handle the emotional ills in this country, 30,000 are needed.'

In other words, unless an individual is one of the favored few with sufficient funds or some other access to the rare psychiatrist, he cannot do a thing to avoid a mental breakdown. He must pile this anxiety upon his existing anxiety. In effect, he has been told, 'You need a psychiatrist but you cannot have one and there is nothing you can do about it,' which is hardly good mental hygiene.

At the same time, 'schizoid publicity' is being activated in another form. In this case, the public is being warned that one out of every 20, or 23, or 25 persons in society is destined to spend some part of his life in a mental hospital. We know that 90-95 percent of the people who do end up in a mental hospital must of necessity spend that time in a state or public institution, and yet, even as their possible fate is being foretold through loud and long embellishments on the radio and screen and in the newspaper, the public institutions are being painted as horror chambers. Their staffs are represented as torture wizards in the form of superintendents, and as guards in the person of the nurses and attendants who are, for the most part, callous and indifferent, with only an occasional angel of light sprinkled among them.

If anything in the world were calculated to produce an anxiety that cannot be easily liquidated, this is it, and this part of psychiatric publicity has reached an all-time high, with an all-time low in over-all mental hygiene for the individual.

These are our problems. In behalf of all psychiatrists, let me appeal to all the men of medicine to make our problems their problems, to enfold us even more closely into the medical profession, to use us, to guide us, and to help us be strong, enduring members of the medical profession, even as we offer to all medical men assistance that can be of value in all branches of medicine.

NON-VENEREAL DISEASES OF THE MALE GENITALIA*

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OKLAHOMA CITY, OKLAHOMA

Excluding the venereal group of diseases which in the majority of cases manifest their lesions on the male genitalia, (syphilis, chancroid; gonorrhea; granuloma inguinal; and lymphogranuloma venereum.) we have a number of diseases and lesions that at casual inspection or to the inexperienced, may often be confused or mistakenly diagnosed as venereal lesions. It is the purpose of this paper to enumerate some of these lesions and diseases, with their diagnostic criteria and symptoms.

SCABIES

The scabitic burrow, is often found on the shaft of the penis and glans, and may sometimes be mistaken for a chancre, especially if no other area of the body is examined. The presence of the burrow, the history of nocturnal itching, the typical distribution on the rest of the body, buttocks, wrist, abdomen along with scratch marks, should help clarify the diagnosis. If venereal exposure has taken place, dark field examination of lesions is indicated. Remember that dual infection can take place and syphilis and chancroid must be ruled out. The important point is to strip the patient and examine him carefully, not limiting the inspection to the genitalia and jumping to a false conclusion.

HERPES PRO-GENITALIA

Genital herpes is a variety of herpes simplex consisting of a very small group of vesicles with a thin roof on an erythematous base. The site on the male is usually the shaft of penis or glans. Subjective symptoms consist of itching and burning, and often a history of repeated attacks. Usually venereal exposure has not taken place, and the patient is often unduly alarmed and worried. Dark field examination to exclude syphilis is advisable.

VERRUCA

Verruca or warts may be of two types, the so-called venereal wart or Verruca Acuminata which often is a grayish-blue color, elongated or filiform collection of warts bunched together in a cauliflower pattern. While called venereal warts, they are often acquired non-venereally. They may be on the glans or coronal sulcus and must be differentiated from the lesions of secondary syphilis or condylomata lata which are flat and eroded. The ordinary "seed wart" or verruca vulgaris may be solitary or in groups on the glans or shaft and usually have characteristic appearance of a wart. Serology tests and dark field examination are often indicated.

MOLLUSCUM CONTAGIOSUM

While these lesions are more often on the trunk or buttocks, they may occur on the penis and scrotum and cause confusion with venereal lesions. The individual lesion consists of a small discrete whitish or flesh colored tumor varying from pin point to pea size with a umbilicated or dimpled center. Often as a result of scratching or trauma, they resemble a chancre. Carefully examine the patient for similar lesions elsewhere and if in doubt have a dark field examination.

SEBACEOUS CYSTS

While rare on the penis they are often present on the scrotum, either single or multiple. The typical sebaceous cyst with its painless, slow growing history and soft pillowy feel usually presents no diagnostic problem. When cysts are inflamed, secondarily infected or ruptured, they may be confused with ventral lesions and differential tests are indicated.

FURUNCLES

Furuncles and hair follicle infections occur on the scrotum and base of penis. When typical, the diagnosis is easy, pain, inflammation, edema and characteristic necrotic

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 16, 1949.

center being present. However, I can recall one patient that had three incisions made in a chancre on the supposition that it was a "boil".

LICHEN PLANUS

Small, flat violaceous papular lesions sometimes occur on the glans. The process is hypertrophic and non-inflammatory, but often pruritic. The lesions are often confused with secondary lesions of syphilis; the absence of a chancre, negative serology and usually presence of similar lesions on the wrists or legs, helps in differential diagnosis.

CARCINOMA

Carcinoma of penis, while not common, must be thought of in any prolonged chronic ulcerative condition of penis or scrotum in which syphilis and other venereal diseases have been excluded. The carcinoma is usually of squamous type and early diagnosis is important as to prognosis. Chancre and gumma are the two conditions with which it is often mistaken. Diagnosis is by biopsy and microscopic examination. Do not hesitate or attempt using various antibiotics and ointments on a prolonged ulceration. Keep in mind that carcinoma does occur on the genitalia and must be considered. While incidence is more common in the latter decade of life, it does occur in younger men.

TUBERCULOSIS

While rare on the genitalia it is usually a slow and destructive ulceration of the superficial tissues. Invasion of the deeper structures with formation of nodules often occurs. Gumma, carcinoma, lymphogranuloma venereum and granuloma inguinale are often the first impressions. Diagnosis is by microscopic study. Tuberculosis may be primary on the genitalia or associated with tuberculosis elsewhere. It is slow and rebellious to treatment.

CONTACT DERMATITIS

While the number of various contact agents are too numerous to recite, a few will be mentioned. Most contact agents produce similar types of lesions and it will suffice to say that edema, itching, burning, and stinging, with small to large vesicular formation involving the shaft of penis and glans or scrotum is characteristic. The most common contact dermatitis is that produced by use of strong medication or washes for a prophylactic purpose, such as bichloride of mercury, ammoniated mercury, iodine, and salicylic acid. Edema ending in ulceration may occur. Contact dermatitis from rubber

of condoms or vaginal diaphragms or prophylactic jellies used by sexual partner may produce lesions that can be mistaken for true venereal diseases.

ERYTHROPLASIA OF QUERAT

This is a precancerous condition of penis characterized by a shiny or velvety, endolent, slightly elevated patch or plaque with a very red granulomatous appearance. It is chronic and the glans is the usual site. Diagnosis is by biopsy.

PSORIASIS

While rarely confined to the genitalia, lesions on glans may occur and diagnostic characteristic, is the dry, flat papule topped with the Mica like white scales. There is usually a history of psoriasis and similar lesions on the elbows and knees. Serology tests are often indicated to rule out secondary syphilis. Remember when a patient who has psoriasis acquires syphilis, his syphilitic lesions often assume a psoriasis-like syphiliderm.

SUMMARY

I have excluded traumatic lesions of genitalia and the group of fungus infections, all of which may occasionally be confusing. An important point that has time and again been brought to my attention, is that many patients with typical chancres of syphilis on the genitalia will deny venereal exposure and attribute the lesions to "chaffing from underwear", "hair cut", "saddle rub", "bruise", "poison ivy", etc. Listen to their story but also investigate and examine before arriving at a conclusion.

I have attempted to enumerate some lesions of male genitalia that may be encountered, that present a diagnostic problem from the venereal diseases. In closing I wish to stress the importance of a careful, thorough examination of the patient; the importance of serology and dark field, and smear examinations, and microscopic study in lesions, along with pitfalls of "snap diagnosis" and dismissal of patient without follow up tests and examinations. Keep always in your mind that the patient may have a non-venereal lesion but he could have syphilis too.

DO YOU KNOW?

About the Oklahoma City physician who mailed his change of address announcements without postage? Lee K. Emenhiser, M.D., asks the Journal to apologize for him and claims it was unintentional. He's moving to 511 N.W. 11th in Oklahoma City.

THE RETROPUBIC APPROACH TO PROSTATECTOMY*

BERGET H. BLOCKSOM, M.D.

TULSA, OKLAHOMA

It is the purpose of this paper to present to this session of the society the latest approach to prostatectomy; namely, the retro-pubic route.

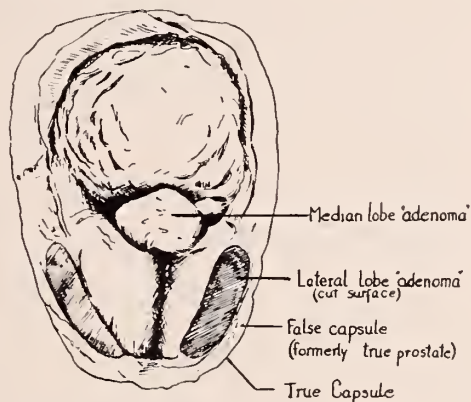
This operation was first described in December of 1945 by Terrence Millen,¹ English urologist, who presented his first 20 cases at that time. It is said that Mr. Millen spent many months working out the details of the operation on cadavers before testing it clinically. Not until June of 1947 was this procedure first presented to the urologists of this country. There were, however, a very few pioneers who had already commenced to accumulate experience with the approach. Outstanding among these was Dr. Samuel K. Baker of Los Angeles who presented his own movie of the procedure.

Another two years have elapsed and I am confident that this approach has been embraced in every major medical center in this country; not, however, to the exclusion of the three other approaches; namely, the suprapubic, perineal and transurethral. Of the three just mentioned the transurethral resection continues to be, and probably deserves to be, the chief alternative method with the retropubic prostatectomy, whereas, the perineal route is reserved for the rather rare, radical extirpation for early carcinoma, and the suprapubic route for cases in which concomitant bladder surgery must be done, as with giant diverticula, giant calculi and carcinoma of the bladder requiring segmental resection of the bladder.

There are, of course, several conditions causing bladder neck obstruction (such as advanced carcinoma of the prostate, contracted bladder neck, and median bar formation) that lend themselves so admirably to transurethral resection that they will not be considered further in this discussion. However, the typical and most prevalent cause of blad-

der neck obstruction is the formation, within the lumen of the prostatic urethra and often extending into the bladder, of so-called adenomata. This condition is generally called benign prostatic hypertrophy.

Hinman² and Huggins,³ in spite of the opposition of some theoretical pathologists, insist that these are true tumors both in origin and clinical behavior. This is an important concept if we are to understand the problem that they present and why urologists have sought a method of enucleating them that would compare favorably with the transurethral resection in terms of mortality and morbidity.



Hypertrophy of lateral and middle lobes of prostate Great hypertrophy of the bladder.

The above pen sketch is that of an autopsy specimen of a typical adenomatous prostate. Note how the true prostate has been compressed into a thin shell by the tumor growth. This is now called the false capsule. Note also the heavy trabeculations resulting from the efforts of the bladder to overcome the obstruction in attempting to empty itself. Between the tumors and false capsule is a well demarcated line of cleavage that permits them to be readily enucleated following any sort of adequate surgical exposure.

*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 16, 1949.

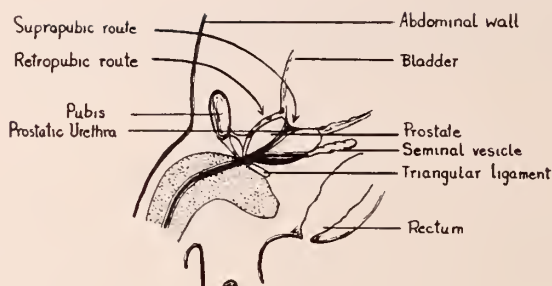


Fig 1 Suprapubic and Retropubic Approach to the Prostate



Fig 2 Capsular Incision in Preparation for Retropubic Enucleation of Prostatic Adenoma

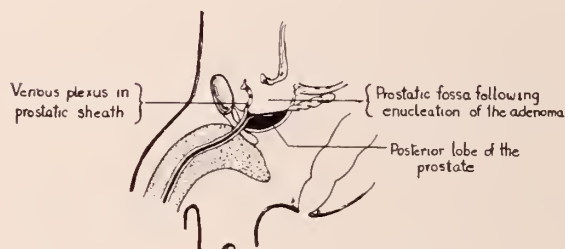


Fig 3 Prostatic Adenoma Enucleated

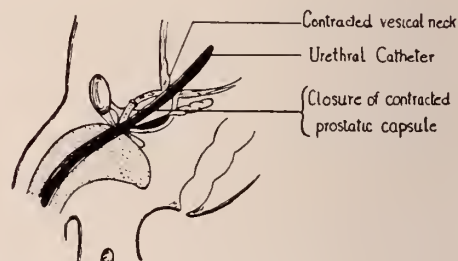


Fig 4 Prostatic Capsule Closure with Vesical Drainage per Urethral Catheter

Fig. 1 is a diagrammatical representation of the anatomy involved, indicating the various approaches.

Fig. 2. shows the incision in the true and false capsule in a case with large adenomata, as practiced in the retropubic approach.

Fig. 3 illustrates the situation immediately after enucleation.

Fig. 4 shows the post-operative situation with the gland contracted down and the urethra restored.⁴

(Figures after Grant, O., Lich, R., and Maurer, J.: Urol. & Cut. Rev. 52:11, 1948).

TECHNIQUE

A low midline incision is made commencing over the symphysis pubis and extending upward two to four inches. The rectus muscles are separated in the midline. The bladder, which has been previously emptied, is depressed and retracted cephalad by the assistant's fingers. The surgeon's finger may then delineate the anterior surface of the enlarged gland distal to the bladder neck in the space of Retzius. More or less fat must be pushed away to expose the capsule of the gland, and, if necessary, a few veins must be ligated. With the gland stabilized by pressure from a finger in the rectum, a one to two cm. transverse incision is made one cm. distal to the bladder neck through the true and false capsule to the adenomata.

There will be more or less bleeding from this incision and any spurters that can be seen are clamped and fulgurated. The field is kept dry with a suction tip. A finger enucleation of the adenomatous mass is then carried out through the incision. At the conclusion of this phase of the operation the edges of the incision may be spread open and the cavity thoroughly inspected. The only significant bleeding will come from the bladder neck region and should be controlled with figure of eight sutures or cauterization. The inside of the bladder is explored digitally and special attention is given to the bladder neck orifice itself. If it is at all tight a V-shaped wedge should be cut out of the posterior aspect. All clots are washed from the bladder and a catheter placed transurethrally into the bladder. The incision in the gland is then closed with a single running suture embracing all layers so as to achieve hemostasis and give a leak-proof closure. A Penrose drain is placed to the space of Retzius, the rectus fascia and skin are closed in the accepted manner and a routine vasectomy is done.

DISCUSSION

It is not my purpose to compare the different methods of approaching this problem. I have now done 26 cases with no mortality or significant complications; the mor-

bidity has been very low, at least as low as the best of transurethral resections. The lack of mortality in this small series is, I readily admit, of little significance in this age of low surgical mortality in general. One has to be careful of mortality figures anyway. A recent report⁴ of 8.5 per cent mortality in 404 consecutive cases, encompassing 364 transurethral resections and 40 suprapubic prostatectomies, done in the charity wards of one of our leading educational institutions illustrates this. The authors of this report felt that enforced prolonged preoperative stay in the hospital, frequently with catheter drainage, was the damaging factor in this series.

What I am interested in is the low morbidity figures. In my series, small though it may be, there was little, if any operative shock; post-operative bleeding was significantly little except in one neglected case, and chills and sepsis have been absent; patients were out of bed on the second day, the catheter was removed in 72 hours, and, typically, patients went home on the seventh day. One patient had to stay as long as three weeks but this resulted from tearing into the bladder and occurred early in the series in a case that had undiagnosed carcinoma. Post-operative drainage from the wound has seldom lasted more than a few hours and

one is impressed by the lack of post-operative pain. Required nursing care is minimal. The operative results have been outstanding and dependably excellent. Sexual powers have not been affected; incontinence has been either absent or minimal and of short duration; there have been no readmissions to the hospital for secondary hemorrhage, and none carry any residual urine. There are no urological cripples resultant from this series of operations. Long range results will, of course, have to await the passage of time, but certainly recurrent prostatism with the necessity of reoperation has been the outstanding feature of the other enucleation operations and there is no reason whatever not to expect the same in these cases.

In closing, may I say that there are many factors influencing mortality, low morbidity and good results with any procedure. I cannot commend this or any of the other procedures to anyone who does only an occasional case. The factors of age alone make the patient with prostatism a problem that requires a peculiar insight that comes only with experience and day-to-day contact with the problem.

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THERAPEUTIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Department of Pharmacology, Medicine,
Surgery and Pediatrics*

ANTIBIOTICS

ARTHUR A. HELLBAUM, PH.D., M.D., HAROLD G. MUCHMORE, M.D.,
HARRELL C. DODSON, M.D., AND HENRY B. STRENCE, M.D.

DOCTOR HELLBAUM: Our discussion today covers the general subject of antibiotics. Well over a hundred of these substances have therapeutic activity. A great many more await investigation, and there is evidence that an untold number remain as yet undiscovered. At the present time only a small number of the known antibiotics possess any clinical significance. The value of penicillin and streptomycin is well known. The evidence for the usefulness of aureomycin and chloromycetin seems to be well

established, although these drugs are as yet relatively new. The status of gramicidin, bacitracin, and polymyxin remains uncertain and more investigation is needed. Even less is known about the remainder of these compounds. In our discussion today, we will emphasize penicillin and streptomycin but will also discuss some of these other substances. Dr. Muchmore, will you briefly describe the mechanism of action of penicillin?

DOCTOR MUCHMORE: Penicillin seems to exert its antibacterial action by interfering with the metabolism of bacteria. Several aspects of this metabolic interference are known and it is quite likely that many of these are related. At present the evidence indicates that penicillin interferes with certain important bacterial enzyme systems. For instance, sulfhydryl groups are dehydrogenated and these groups are possibly prevented from participating in cellular metabolism. It has been stated that the sulfhydryl group in carbohydrate enzymes is concerned with oxidative processes. Glutamic acid is normally assimilated across the bacterial cell wall and in the presence of penicillin this assimilation ceases or becomes minimal. Glutamic acid is apparently associated with desoxyribonucleic acid metabolism, and this too appears to be disturbed by penicillin. Cytochrome-cytochrome oxidase systems are disrupted. These last enzyme systems are very important in energy transfer. It is possibly significant that many bacteria which are resistant or unaffected by penicillin are either deficient or entirely lacking in these cytochrome systems. Several other metabolic steps seem to be completely inhibited. It is not known how all of these facts are interrelated; however, a considerable amount of research is being done on these problems and it is likely that the situation will become clearer in the future.

DOCTOR HELLBAUM: Let us now turn to some of the therapeutic applications of these antibiotics. Dr. Dodson, will you tell us some of the uses the surgeon has for penicillin?

DOCTOR DODSON: Penicillin plays a most important role as an adjunct to good surgery and is used in preventing and treating infections. In other words, we might say that its uses are either prophylactic or therapeutic. Prophylactically, it is used in operations in which there is a potentially contaminated field, or in one which is actually contaminated and potentially infected. For example, it is used almost routinely in skin grafting on a granulating surface because these surfaces are usually considered potentially contaminated. It is also used in operations involving large skin flaps where a good bit of undermining is necessary, resulting in postoperative collections of serum. This serum is a good culture medium.

DOCTOR HELLBAUM: When is penicillin administered?

DOCTOR DODSON: Some surgeons prefer to start penicillin twenty-four hours before the operation. Most of them start it at the time of operation.

DOCTOR HELLBAUM: Is it used routinely in most operative procedures?

DOCTOR DODSON: It is used quite frequently. For example, in gastro-intestinal surgery any time the lumen of the bowel or the lumen of the biliary tract is opened or when the urinary tract is explored, it is quite customary to administer it for a period of three to five days postoperatively.

DOCTOR HELLBAUM: Is penicillin effective when the lumen of the bowel is opened? The type of bacteria found there are usually said to be resistant to penicillin.

DOCTOR DODSON: Yes, it appears to be effective if it is given in adequate dosage. The dosage has to be varied according to the susceptibility of the organism, but we know that established peritonitis following a ruptured appendix or perforated colon, for instance, subsides if penicillin is given in adequate dosage.

DOCTOR HELLBAUM: What is an adequate dosage in these cases?

DOCTOR DODSON: It is necessary to give high doses of 100,000 to 500,000 units every two hours, and even more is sometimes required. I do not know whether the coliform organisms are destroyed by this high dosage, but the patient usually responds clinically.

DOCTOR HELLBAUM: This is an important point. We have always said in the past that the coliform organisms were not only resistant to penicillin but actually destroyed penicillin by producing an enzyme penicillinase which specifically inactivates penicillin. Recently evidence has been presented that the coliform organisms are destroyed if the penicillin concentration in the blood is pushed to 12.0 units per ml. instead of the customary 0.03 to 0.06 units per ml.

What about the masking action of penicillin? Is not the administration of penicillin to all surgical cases sometimes lead to a false sense of security?

DOCTOR DODSON: Yes. That is very true and it is one of the dangers of the use of penicillin. We have a woman in the University Hospital right now who had received intensive penicillin treatment for five days for syphilis and during that time she developed an abdominal distention and came here with the picture of an acute mechanical intestinal obstruction with normal temperature and a relatively normal white count.

At operation she was found to have a diffuse peritonitis from a ruptured pelvic abscess and this situation had apparently been masked by the penicillin she had previously received. One should be on the lookout for this masking effect. The infection may actually be present but not clinically manifest and will be missed unless it is searched for carefully, always considering that the patient has received penicillin. Intraperitoneal abscesses can be masked in this way if penicillin is used prophylactically after an appendectomy and the infection might not become apparent until the penicillin has been discontinued.

DOCTOR HELLBAUM: Dr. Strenge, will you discuss the indications for the use of penicillin in pediatrics?

DOCTOR STRENGE: It has been implied that the indication for penicillin in pediatrics is fever. That is not true. The indication for penicillin in pediatrics as in any other field is the existence or the probability of an infection with an organism sensitive to penicillin. The sensitive organisms include most of the gram positive cocci and a few of the gram negative organisms. I do not mean to imply that it is necessary to culture and obtain definite proof of the existence of a sensitive organism as the etiological agent before penicillin therapy is started. The nature and location of the infection is often sufficient evidence to justify the use of penicillin; however, one should attempt to sift out the virus infections and certain others which do not respond and to use penicillin primarily in streptococcal, pneumococcal, and staphylococcal infections. There are certain instances where one may be quite certain that the infection does not exist but may arise secondarily, for instance, as a complication of a virus infection. Ordinarily, penicillin is not used prophylactically in such cases. However, in some disease processes where the existence of a bacterial infection might be particularly significant such as inactive rheumatic fever or nephritis, the prophylactic use of penicillin is justifiable.

DOCTOR HELLBAUM: In treating pneumonia is there much difference in dosage for a youngster and for an adult?

DOCTOR STRENGE: The usual dosage we use at Children's Hospital is about 30,000 units every three hours. Such a dose is by no means comparable to those used in dealing with colon bacillus, but I think that 30,000 units every three hours is adequate in treating most pneumonias in adults. I am sure

that we could use smaller doses in children, but there doesn't seem to be any point in running the risk.

DOCTOR HELLBAUM: How is penicillin used in the treatment of meningitis?

DOCTOR STRENGE: The treatment of meningitis brings up a point which is being widely discussed. That is, the intrathecal use of penicillin. The intrathecal use of anything is open to objection. Originally the antisera were used intrathecally and it was found that they did more harm than good when given by that route. Today when the antisera are used they are given only intramuscularly or intravenously. Again, sulfonamides were originally tried intrathecally and the same conclusion was reached; that is, they are at least as effective if given by other routes and the intrathecal use appeared to be quite harmful. Penicillin has run something of the same course, but it hasn't quite reached the end as yet, so it is still being given intrathecally in some cases. Its use intrathecally in the treatment of a meningococcus meningitis has been largely abandoned. It is still used intrathecally in the treatment of pneumococcal meningitis. Experimental evidence shows that penicillin is harmful intrathecally; however, in small doses one apparently can avoid severe complications. If the infection is a grave one such as pneumococcal meningitis the majority of the pediatricians still use it intrathecally, I believe, however, further evidence may lead us in the near future to abandon intrathecal use entirely.

DOCTOR HELLBAUM: Do you still use supplemental serum treatment?

DOCTOR STRENGE: We do when we can get it. For example, we use it in hemophilus meningitis which of course is not treated with penicillin. We do not use antiserum in meningococcal meningitis. We probably would use antiserum in pneumococcal meningitis if we could get the antiserum, but it is not readily available.

DOCTOR HELLBAUM: Dr. Muchmore, what are some of the indications for penicillin in medicine?

DOCTOR MUCHMORE: The indications are, of course, approximately the same as they are in pediatrics; that is, chiefly in streptococcal, staphylococcal and pneumococcal infections. In addition, penicillin is the drug of choice in the treatment of gonorrhea, syphilis, actinomycosis, and certain others. The problem of the use of penicillin intrathecally is also present in internal medicine, and has not been settled as yet.

DOCTOR HELLBAUM: There are two chief objections to the use of antibiotics. First is the development of resistance to the antibiotic by the organism and the other is the problem of toxicity. Dr. Muchmore, would you discuss the problem of resistance to penicillin and streptomycin?

DOCTOR MUCHMORE: Bacterial resistance will develop in some degree to all of these antibiotic substances. Resistance will develop to penicillin and to streptomycin and to every other antibiotic that has been tested for an adequate period of time. Not only will these bacteria develop resistance, but bacterial dependence has been demonstrated with penicillin, streptomycin and the sulfonamides. That is, bacterial strains have developed which require these substances for growth. They are unable to grow in the absence of penicillin or streptomycin. Bacterial resistance develops slowly to penicillin but very rapidly to streptomycin.

According to Demerec and his co-workers, resistance to penicillin and streptomycin is connected with genetic processes in the bacteria, and involves mutation. He states that the genes which govern resistance to penicillin are equally potent and mutations of these genes always result in the same amount of bacterial resistance to penicillin. On the other hand the genes controlling resistance to streptomycin are not equi-potent. Some of the genes are powerful and some of them are very weak; consequently, any given mutation may produce a very small increase of resistance or it may be a very large increase. It has been reported that resistance to streptomycin may increase over 30,000 times during one division of the bacteria. This would conceivably lead to a very rapid development of complete resistance to the action of streptomycin.

DOCTOR STRENGE: Is this a matter of stimulating mutations by the penicillin or streptomycin, or is it simply a question of killing off of the non-resistant organisms?

DOCTOR MUCHMORE: That is a very good point. In some of the work mentioned above the cultures used were very pure; that is, they were obtained from only one or two organisms and were therefore probably all of the same strain and hence of an equal resistance to penicillin or streptomycin. It is an important question whether or not the resistance observed in a patient is due to the development of resistance by the bacteria or whether it is only an apparent resistance resulting from the killing off of

susceptible bacteria and leaving those which were resistant to the antibiotic before treatment was started, to carry on the infection. It seems likely that it is a combination of these two factors.

DOCTOR HELLBAUM: Suppose one has a patient with a persistent, chronic infection by an organism that is relatively insensitive to drugs, as for example, in chronic prostatitis. Dr. Dodson, do you use combinations of chemotherapeutic agents? In other words, is there an advantage in using a combination of penicillin and sulfadiazine, or sulfadiazine with streptomycin?

DOCTOR DODSON: We ordinarily do not use more than one drug at a time. If the infection is one that proves resistant to penicillin, we sometimes change to another agent. In some severe infections, such as peritonitis, many men use penicillin and sulfonamides together, or even penicillin, streptomycin, and the sulfonamides all at once. Usually it is not necessary to use combinations to combat infection. However, if an infection such as you described failed to respond to treatment by one drug, it certainly would be worthwhile to give the combination of one or more of these agents.

DOCTOR HELLBAUM: Many chronic infections apparently respond to penicillin or streptomycin treatment only to recur in three or four weeks. Specifically, this is true of chronic cystitis or prostatitis. Is this due to the development of resistance; is it recurrence, or are other factors involved?

DOCTOR DODSON: In most chronic recurrent infections such as cystitis and prostatitis there are other factors involved such as interference with drainage, in this case urinary retention.

DOCTOR HELLBAUM: Are we not inclined sometimes to get a little over-enthusiastic in the use of antibiotics in treating conditions in which surgery was used in the past? I was thinking of cellulitis and abscesses, for example. Dr. Dodson, will you discuss the relationship of surgery and drainage to the use of antibiotics?

DOCTOR DODSON: As I mentioned previously, the antibiotics are primarily adjuncts to surgery. These substances do not permeate to any considerable extent a thick-walled abscess or a well localized inflammatory process, apparently because an adequate blood supply is needed to carry them to the site of infection. Of course, it may be used locally in certain situations, but ordinarily in localized infections the antibiotics when

given parenterally do not have much value except to prevent extension and combat any associated lymphangitis or cellulitis that may accompany the local abscess. Such use certainly does not alter the surgical treatment of rest, heat, and drainage.

DOCTOR HELLBAUM: Dr. Strenge, will you discuss the toxicity of streptomycin?

DOCTOR STRENGE: Toxicity to streptomycin is most frequently encountered in those cases in which the drug is used in considerable quantity. Thus in the treatment of tuberculosis no toxic effects are usually encountered until after the drug has been used for more than one week. The most important toxic effect is damage to the eighth nerve resulting in temporary or permanent nerve deafness, or in loss of vestibular function. The disturbance of equilibrium and ataxia has been for the most part reversible in my experience. I understand that in adults it is sometimes not so reversible. Allergy and skin rashes are not uncommon, although these are not usually serious. Febrile reactions are sometimes seen and renal damage may occur with albuminuria and hematuria.

DOCTOR HELLBAUM: How do you counteract these effects?

DOCTOR STRENGE: For the deafness and ataxia, there is no treatment except the withdrawal of the drug. At present there is no known means of counteracting it and in diseases which are usually fatal, such as tuberculous meningitis, we feel that the good result of treatment overshadows the disabling effects of the nerve damage.

DOCTOR HELLBAUM: Recently the toxicity of streptomycin to the eighth nerve has been used in treatment of Meniere's disease and destruction of eighth nerve function has said to afford relief to these patients. Dihydrostreptomycin has been introduced recently. Is there any difference in toxicity between this drug and streptomycin?

DOCTOR STRENGE: Dihydrostreptomycin is reported to be less toxic to the eighth nerve and consequently gives a lower incidence of deafness and ataxia. It has also been said that dihydrostreptomycin is contraindicated intrathecally.

DOCTOR MUCHMORE: Streptomycin toxicity seems to be a matter of blood level and duration and the same is true for dihydrostreptomycin, but the latter requires higher dosage to produce the same damage that will be produced by streptomycin. Qualitatively, the toxicity seems to be the same; that is, dihydrostreptomycin attacks the eighth nerve,

the skin, and the kidneys in the same manner as does streptomycin.

DOCTOR HELLBAUM: Dr. Muchmore, what are the chief toxic reactions to penicillin?

DOCTOR MUCHMORE: For all practical purposes, the only toxicity of penicillin is sensitivity. That is reported to occur in about five to 10 per cent of all individuals who have had a course of penicillin. The incidence is somewhat higher following topical application. Most of these sensitivity reactions involve the skin and include itching, rash, erythema, urticaria, angioneurotic edema, and possibly exfoliative dermatitis, although this last would be very rare. There have been a few deaths reported due to penicillin. Recently one was reported in the J. A. M. A. which was supposedly due to an anaphylactic-like reaction. Since the toxicity of penicillin is almost all due to sensitivity, the treatment consists of the use of the anti-histamine drugs which give very good results, and will take care of many manifestations of penicillin toxicity, thus allowing the patient to continue penicillin medication. If the reaction continues and becomes more severe, of course penicillin must be discontinued.

DOCTOR HELLBAUM: What about the Herxheimer reaction encountered in the treatment of syphilis?

DOCTOR MUCHMORE: I should have mentioned that before. It is one of the most dangerous of the penicillin reactions. It is stated that the Herxheimer reaction is more severe with penicillin treatment than it is with arsenical treatment because penicillin is a more powerful anti-syphilitic compound than are the arsenicals. Of course the danger varies depending upon the site of the Herxheimer reaction. For example, if the syphilitic lesion in which the reaction occurs is around the coronary artery, it has been said that it is possible to produce coronary insufficiency and possibly even myocardial infarction. If the syphilitic lesion is a gumma involving the aorta, it might produce trouble under penicillin treatment. A reaction in a gumma of the brain might produce signs of increased intracranial pressure. It is sometimes recommended that when treating syphilis with penicillin, the initial dosages should be low and build up to higher level to avoid a severe Herxheimer reaction.

DOCTOR HELLBAUM: Is penicillin the treatment of choice for central nervous system lues?

DOCTOR MUCHMORE: At the present time the consensus seems to be that central nervous system syphilis does not respond to penicillin even in tremendous dosage as well as it responds to arsenic and fever therapy. However, papers have appeared recently which state that penicillin is the drug of choice for the treatment of all forms of syphilis, including syphilis of the central nervous system. At the present time the matter does not seem to be settled.

DOCTOR HELLBAUM: Would you discuss the use of penicillin on the surface, that is, topical application?

DOCTOR MUCHMORE: I mentioned earlier that a higher incidence of sensitivity follows the surface application of penicillin. Apparently there are several factors acting in the production of the sensitivity, the chief ones being the concentration of the penicillin ointment that is used and the duration of application. The concentration of the ointment should not exceed 1000 units per cc. or gram of ointment and the duration of the application should not exceed one week, according to Tobias and Greenhouse. The conjunctival membrane may be sensitized by only one application. Although penicillin ointment is very efficient in the treatment of impetigo and infectious eczema, and certain other acute skin infections, it is no better than hot boric acid packs, and the latter is preferred therapy. Hot boric acid packs combined with ammoniated mercury ointment will cure up the ordinary acute skin infection as rapidly as penicillin ointment, and without the possibility of producing sensitivity to penicillin. This sensitivity might cause trouble in the parenteral use of penicillin later in a severe infection such as pneumonia, and it is questionable as to whether penicillin should ever be used on the skin for an infection that can be treated just as well by other means.

DOCTOR HELLBAUM: What about the use of nose drops, sprays, lozenges and medications of that type containing penicillin which have flooded the market recently?

DOCTOR MUCHMORE: Unless the area is cleansed of all exudate and discharges, I do not think the penicillin reaches the site for which it is intended. In cases of acute sinusitis the instillation of penicillin directly into the sinus after irrigation and drainage is of value. Probably parenteral administration of penicillin should accompany local instillation in cases of infectious sinusitis. As for penicillin-containing nose drops,

those are worse than useless. Nothing is accomplished except possibly the sensitization of the patient to penicillin.

DOCTOR HELLBAUM: Dr. Strenge, what do you think of the use of nose drops, sprays, and so on?

DOCTOR STRENGE: I am of the same opinion as Dr. Muchmore, however, there is a form of topical application that we have used, and that is aerosol penicillin or penicillin inhalation. It has a rather limited field of usefulness. In the preoperative preparation of the bronchiectatic patient I don't think there is anything that will equal it. There are some people today that say that intramuscular penicillin is just as good, but it does seem that with the inhalation of this very fine droplet or dust form of penicillin one sees a considerable reduction in the amount of exudate, reduction in sputum, general improvement of the patient, and a much better subject for operative treatment.

DOCTOR MUCHMORE: It should be pointed out that following this method of administration the penicillin is promptly absorbed from the large surface area of the lung and an appreciable blood level is obtained. There is no doubt that the bronchiectasis is considerably improved; however, it is doubtful that any case of bronchiectasis has ever been permanently cured with aerosol penicillin. Inhalation of penicillin has also been used in the treatment of lung abscess, pneumonia, and other infections of the lung. It might be pointed out at this time that streptomycin is not absorbed or is absorbed very poorly when given by the same route.

DOCTOR HELLBAUM: That is an interesting and important point. Now let us consider the subject of the manner and route of administration. There has been a considerable discussion in the current literature on the question of discontinuous administration of penicillin against the attempt at maintaining constant blood levels. Dr. Strenge, would you give us your opinion on this subject?

DOCTOR STRENGE: In the past, most workers have attempted to achieve a constant level of penicillin in the blood, a level that was theoretically above the critical level which would be effective in a given disease. Probably this idea of a critical level for penicillin arose from experiences in the use of sulfonamides in which it was found that if the blood level were allowed to drop below a certain measurable value, its use was ineffective in a particular instance. From the

very start we used penicillin in the same way. Initially, you will recall it was given by intravenous drip. However, that was found to be cumbersome; and also the rubber in the tubes seemed to destroy a large part of the penicillin, so it was administered intramuscularly every two to three hours. This is the technique which is still used to a great extent in this hospital.

Various attempts were made to provide continuous levels of penicillin with less trauma and to find some lasting form of penicillin. By mixing penicillin in oil and beeswax Romansky was able to maintain a fairly constant blood level of penicillin 12 to 18 hours after a single injection. This particular mixture was still rather painful and tended to leave abscesses, or at least fibrotic nodules in the tissue which were quite objectionable. Recently a number of penicillin compounds such as procaine penicillin in various oils, procaine penicillin in large, slowly dissolving crystals, and procaine penicillin with an aluminum plate around the crystals, have been prepared. The purpose of these various preparations was to maintain a slow absorption and a constant blood concentration of penicillin.

Along with these developments in the form of the drug there has been an increasing amount of doubt as to the fundamental necessity for the maintenance of continuous levels of penicillin in the blood. Recently there have been several articles which have advocated the use of penicillin in a discontinuous manner. For example, one or two doses of penicillin in the amount of 100,000 to 300,000 units, given once or twice each day, have been found to be fairly effective. In fact, they are reported to be as effective as the more frequent small doses for simple infections such as pneumococcal pneumonia and streptococcal sore throat. These same writers, however, are still quite skeptical as to the dependability of such treatment in serious illnesses such as subacute bacterial endocarditis, deep-seated staphylococcal infection, and so on, and feel that it would probably be wise to maintain a high blood level. I don't know what the final answer is going to be. Perhaps Dr. Muchmore has something to say about the pharmacology of discontinuous therapy.

DOCTOR MUCHMORE: I want to mention something about the use of kidney blocking agents in the maintenance of the penicillin blood level. About 80 per cent of administered penicillin is excreted through the tubules

of the kidney, while about 20 per cent passes through the glomerulus by simple filtration. The excretion is very rapid and of course that meant that the blood level quickly falls. This caused the search for a long lasting form of penicillin which would maintain a prolonged blood level following a single injection. Certain compounds are known to be excreted almost exclusively by the renal tubules, and two of these drugs, diodrast and para-amino hippuric acid, were given in an attempt to block the tubular excretion of penicillin. They did accomplish that purpose, resulting in a more prolonged blood level. However, para-amino hippuric acid is itself quite rapidly excreted and diodrast is a rather toxic drug, so that these two are not so satisfactory, even though they maintain a higher blood level of penicillin by actually blocking the excretion of the kidney. Another compound, caronamide, has been developed. This substance is excreted by the glomerulus of the kidney, but interferes with the tubular excretion of penicillin and helps maintain a satisfactory blood level. However, caronamide has not been too popular because it produces some gastro-intestinal irritation and vomiting, in the usual dosage, and rather large amounts are required, thereby adding the cost of another drug to the treatment. Furthermore, penicillin has become so cheap that it seems to be more logical to give an increased amount of penicillin rather than attempting to maintain the blood level by other often more expensive means.

DOCTOR HELLBAUM: We have outlined three main types of penicillin administration: 1) intramuscular injection every two, three or four hours; 2) the use of long lasting preparations, such as procaine penicillin or procaine penicillin with aluminum monostearate; and 3) the discontinuous administration, or the single large intramuscular injections of the water soluble preparation once or twice a day. At this time it is not certain which is the best method. Would you care to comment on this subject, Dr. Dodson?

DOCTOR DODSON: Dr. Strenge mentioned that there has been some very excellent work recently which would indicate that for practical purposes an 8-hour or 12-hour dosage interval using larger doses is quite adequate for organisms that are extremely sensitive to penicillin, that is, streptococcus, staphylococcus and pneumococcus in their ordinary manifestations. I think this method is worthy of trial.

DOCTOR HELLBAUM: It has also been pointed out that blood levels or plasma levels of penicillin do not necessarily reflect the tissue level of the penicillin. There is evidence which indicates the level of antibiotic in tissue fluid remains up for a considerable period of time after it has disappeared from the blood or plasma. Other work has shown that bacteria remain inactive or do not divide for several hours after they have been subjected to penicillin and hence it may not be necessary to maintain a constant blood level. One should not forget, however, that in certain resistant staphylococcus infections or in subacute bacterial endocarditis or syphilis the blood levels probably should be kept high and relatively constant. Dr. Muchmore, would you say a word about aureomycin?

DOCTOR MUCHMORE: At the present time aureomycin and chloromycetin seem to be very similar compounds and can be discussed together. They are effective against a very wide range of organisms. Perhaps the most remarkable is the fact that they seem to be effective against the rickettsial infections such as Rocky Mountain spotted fever, scrub typhus, endemic typhus, and other rickettsial diseases. They have been reported to be active against the viruses of the lymphogranuloma venereum and psittacosis group and it has been said to be the best treatment for brucellosis. These drugs are administered orally in doses of 4 to 6 gm. per day. The oral route is preferred because there is muscular irritation and pain following injection. At the present time the drugs are quite expensive but the price will undoubtedly drop. Chloromycetin has recently been synthesized commercially and undoubtedly will be available in large quantities very soon.

DOCTOR STRENGE: We have used aureomycin on one patient who had typhoid fever. The course of the disease was identical with that which we would have predicted without the use of any specific treatment.

DOCTOR HELLBAUM: Here is a question for Dr. Dodson from the audience. How would you treat cellulitis which has failed to show response to penicillin? Streptomycin has been tried without effect, and the patient is sensitive to sulfonamides.

DOCTOR DODSON: That would be an interesting case. Aureomycin or chloromycetin might be worth a trial, but I think bacitracin would probably be preferable in cellulitis because it is effective against a very wide range of organisms. In such a case one must always consider the possibility of an error in diagnosis, and that one may be dealing with a foreign body or an abscess, or something of that nature which would require an incision and drainage.

DOCTOR HELLBAUM: Another question. Should one continue penicillin after it is given in adequate dosage for seven or eight days?

DOCTOR DODSON: I think that depends upon the type of infection one is treating. If it is an acute infection such as cellulitis, or an acute sore throat, that ordinarily responds rather rapidly, probably seven or eight days might be considered a fair trial; however, if the disease is serious, such as subacute bacterial endocarditis, or peritonitis, then that period of time would be considered inadequate.

DOCTOR MUCHMORE: The question of diagnosis is very important. It is so easy to say: "Well, try penicillin, and if it doesn't respond to penicillin then the infection is resistant." In a recently published series of 250 penicillin resistant gonorrhea cases it was found that only about 20 of these cases were gonorrhea and that the others were miscellaneous urethritis cases from various causes which were not amenable to penicillin therapy. One should be sure of his diagnosis before saying that this is a penicillin resistant infection.

DOCTOR HELLBAUM: We have considered today many of the problems which are encountered in the use of the various antibiotics in the treatment of infections, and we have considered some of the new antibiotics which have recently become available. It has been pointed out that chloromycetin and aureomycin may be given orally, which will be a boon to most patients and that for the first time we have a drug which is perhaps really effective against certain viruses and rickettsial diseases. Possibly serious drawbacks will be encountered in the use of these drugs, but undoubtedly they or others will assume prominence in the future.

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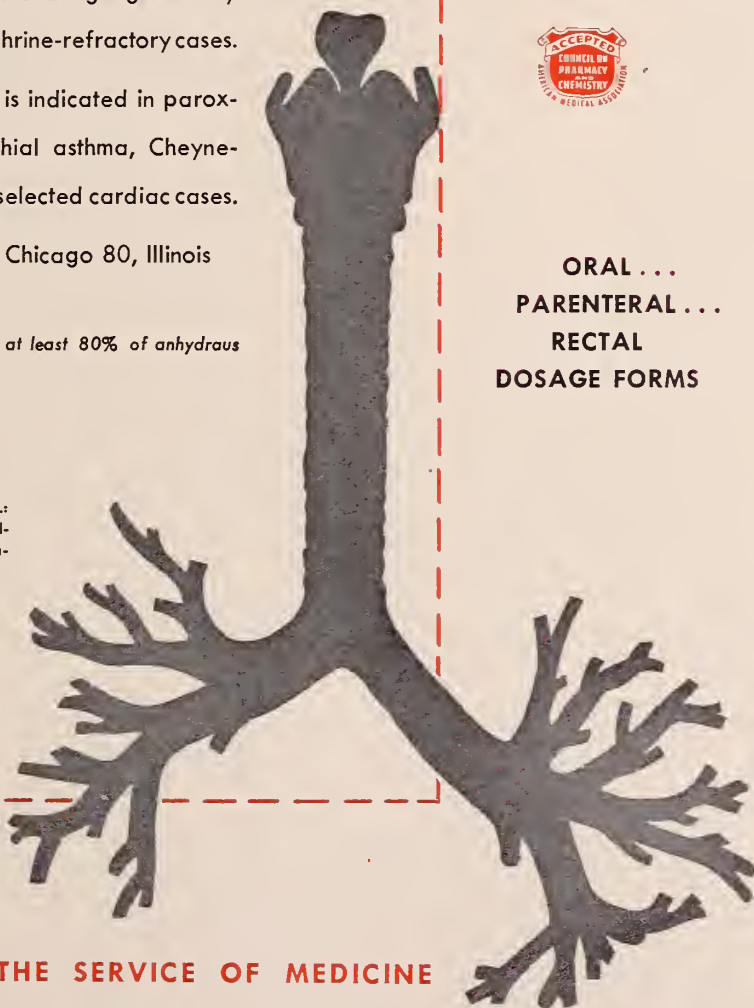
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1. Rackemann, F. M., in Cecil, R. L.: Textbook of Medicine, ed. 7, Philadelphia, W. B. Saunders Company, 1948, p. 539.



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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

President's Page

How fast can a country travel toward complete governmental domination of its people?

This question was answered by Mr. Cecil Palmer of England addressing the Conference of Presidents and Other Officers of State Medical Associations in Atlantic City at the recent meeting of the American Medical Association.

England's Minister of Health promised openly that under governmental medicine the physician-patient relationship never would be violated. Yet within three weeks after passage of Health Legislation creating socialized, governmentally controlled or political medicine he issued "Statutory Instrument No. 506" which provided that the terms of service require that a physician keep a record of the diagnosis and treatment of every patient and make these records available to the LAY MEDICAL COUNCIL. There is gone privileged communication.

What is a Statutory Instrument?

It is a regulation, edict, executive order — in effect a law set forth by one in high governmental authority which cannot be challenged in the courts. Already there were 505 Statutory Instruments in effect in England before this one dealing with the physician-patient relationship, and not one of them is subject to judicial review!

Another law which came into being recently in England and shows further evidence of the rapidity with which all rights and liberties can be usurped was designated the "Control of Engagements Order." The Control of Engagements Order provided that men and women, 18 to 50 years, may be directed to take a job anywhere, any time, according to the State's choice. What is this except peacetime conscription?

Let us become aroused by the encircling tentacles of this giant octopus and let us in turn arouse the public.

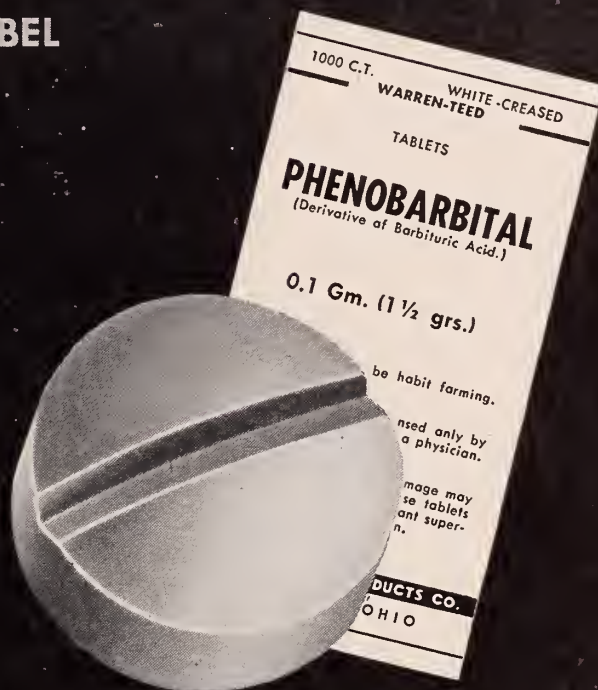
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PUBLIC RELATIONS REPORTER

DR. RECORDS APPOINTED

John W. Records, M.D., Oklahoma City, has been appointed to replace John F. Burton, M.D., Oklahoma City, as Vice-Chairman of the Public Policy Committee. Dr. Burton resigned the Vice-Chairmanship following his election as State Association Delegate to the A.M.A.

Dr. Records has worked in close touch with the Public Policy Committee, serving two years as a member of its Newspaper Sub-Committee. In connection with the new office, he will also replace Dr. Burton as the Oklahoma campaign director of the A.M.A.'s National Education Campaign.

* * *

COMMITTEE ACTIVITIES

Summer has meant no let-up in activities of the Public Policy Committee. The News Letter to all members of O.S.M.A. has been issued monthly, news releases have been made to all state newspapers at frequent intervals, quantities of National Education Campaign literature have been distributed, and exhibits depicting the accomplishments of American medicine under the free enterprise system have been prepared for use at state and county fairs.

Both the volume of correspondence handled by the committee and the quantity of space given to the question of compulsory health insurance by state newspapers indicate increasing awareness of the dangers of socialized medicine by the layman.

* * *

REPORT FROM ENGLAND

Those who closely follow England's National Health Service to draw a parallel between what is happening there and what could happen here if the compulsory health insurance proposals of S. 1679 were enacted into law will be interested in this resumé of a cabled report from London appearing in a recent Wall Street Journal:

The Wall Street Journal reports that "free" health service has been costing the British treasury too much money. Another complaint against the system is its abuse by the public.

Government planners originally estimated the cost of national health care for Great Britain at just over \$700 million for the first year's operation, but the total ran to about \$990 million. Disbursements for den-

tal services alone ran two and a half times the original calculation; the estimated cost of the free optical service was \$9 million and the actual cost totaled \$59 million. In line with this, one cannot help remembering the frequent reports that English pawn shops are flooded with eyeglasses, and that people are obtaining prescriptions for drugs and exchanging them for cosmetics, perfume, and other non-essentials.

The Wall Street Journal states also that public abuse of health facilities has been a major factor in pushing costs up. Parliament's Select Committee on Estimates, watchdog of government spending, criticizes a rush to drug stores for free aspirin, bandages, and other medical supplies, and remarks that wasteful issuing of prescriptions has further stimulated drug demand.

Warning that public exploitation of the health scheme presents a "grave threat" to its maintenance and expansion, the committee tacitly recommends that the public trim its demands. More specifically, it urges an over-all tightening of the service's administrative machinery.

* * *

A WELFARE STATE IN ACTION

From New Zealand, which for twelve years has had a Labor Government, with ten years of Social Security and eight years of socialized medicine, comes this report:

It is almost impossible to get anyone to work. The want ad pages of newspapers are filled with offers of jobs. Under Social Security — which includes benefits for old age, invalids, widows, orphans, sickness, and so on — taxes are so high there are no private savings with which to provide the tools of production so desperately needed.

As practically everyone is eligible for benefits of some kind, there is little incentive for people to work. Every family receives ten shillings a week for every child from birth to sixteen years of age and is able to live comfortably on the government dole. Housing is heavily subsidized by the government and it is possible to secure homes at very low rates.

Under socialized medicine in New Zealand, people flock to the doctors for treatment of the most minor ailments and every doctor's office is overcrowded. This first-hand report states that shocking evidence of the quality of treatment can be given.



Building stones

Tissue repair is the keystone of the recovery process. It makes little difference if the infection is halted, the fracture reduced, or the metabolic imbalance adjusted—it is the patient's own cells that must complete the cure.

While true hypoproteinemia is comparatively rare, nevertheless hypernutrition with essential amino acids during the

recovery process has been shown empirically to speed the patient upon the road to normal health. Amino acid preparations should be supplemented by moderate amounts of vitamins.

Lederle research has for some time been concerned with such mixtures of amino acids and vitamins and their application in the field of nutrition.

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DISCOVERER OF PENICILLIN DEDICATES RESEARCH FOUNDATION

That More May Live Longer In impressive ceremonies at 4 p.m. Sunday, July 3, the Oklahoma Medical Research Foundation was dedicated with Sir Alexander Fleming, the discoverer of penicillin, making the dedicatory address.



Governor Roy J. Turner invited Dr. Fleming to come to Oklahoma City from London, England. The program was broadcast by radio stations of the Oklahoma Network and Group Broadcasters.

Thousands of persons attended the program which included brief addresses by Governor Turner, J. G. Puterbaugh, McAlester, Foundation president, and William McCraw, Dallas, international executive director of the Variety Club. The Variety Club of Oklahoma pledged \$600,000 toward the cost of the institution home which will be known as the Variety Club Building of the Oklahoma Medical Research Foundation.

Feature of the ceremony was the presentation by Dr. Fleming of a small, hermetically sealed glass locket containing a portion of the original mold from which he discovered penicillin in 1929. The medical treasure will be a permanent part of the Foundation museum when the building is completed in June, 1950.

The dedication ceremonies marked a major milestone in the Foundation movement, which has seen more than 7,500 Oklahoma professional men and women and private citizens pledge more than \$2,400,000 toward the goal of three million dollars. Pledges have come from every county in the state, and have ranged in size from 30 cents to \$26,000.



Dr. Fleming and Dr. Lamb go on the air over a nationwide hookup.

Governor Turner, who has actively served as general chairman, has called the Foundation "the greatest thing to happen in Oklahoma since statehood."

The A.M.A. sponsored an NBC coast-to-coast broadcast featuring Dr. Fleming, Saturday, July 2. The broadcast originated in the studios of WKY and was a dramatization of The Foundation Story beginning with the fact that the late Dr. Tom Lowry, and a group of the O. U. medical alumni association, formulated the initial idea. John H. Lamb, M.D., secretary of the Foundation, also appeared on the program. The dedication ceremonies were filmed for television, rushed by air express to New York for the NBC television news reel July 4.

POSTGRADUATE COURSE NOW IN PROGRESS

The Oklahoma State Postgraduate course in Internal Medicine began its first series of lectures in Claremore, Vinita, Miami, Pawhuska and Bartlesville on July 18, 1949. The Postgraduate Committee reports that the registration is excellent, the attendance enthusiastic and Doctor Becker's ability as a teacher is gratifying.

Doctor Becker arrived in Oklahoma in early July and will be with us for two years, during which time he will cover the entire state. Doctor Becker is giving the doctors of Oklahoma the benefit of his intensive training and clinical experience in the diagnostic centers of Chicago and Boston. He is enthusiastic about the teaching program and eager to give additional lectures to small groups who wish instruction in specific subjects.

After searching for a competent, adaptable instructor for more than six months the Postgraduate Committee is more than pleased to have obtained Doctor Robert Becker's service for the next two years.

The second circuit of instruction will begin in Eastern Oklahoma the week of September 26. The counties to be included will be Adair, Cherokee, Wagoner, Muskogee, Okmulgee, Okfuskee, McIntosh, Pittsburg, Latimer, Haskell, Sequoyah and LeFlore. The teaching centers will be Poteau, McAlester, Okmulgee and Muskogee.

EXCHANGE FELLOWSHIPS IN CANCER OFFERED

British American Exchange Fellowships in cancer research of the American Cancer Society, awarded by the Society upon recommendation of the Committee on Growth of the National Research Council, are offered to citizens of the United States for advanced training and experience in Great Britain in specialized fields of investigation pertaining to the problem of cancer.

Similar fellowships are awarded by the British Empire Cancer Campaign to British scientists for study in the United States, it was announced. The fellowships are awarded by the American Cancer Society to provide specialized training for American investigators in Great Britain where opportunities exist for study in facets of research in malignant disease not widely available in this country. Fellowships, which are awarded for a period of one year, will be open to citizens of the U.S. who possess the degree of Doctor of Medicine, Doctor of philosophy or Doctor of Science. Application forms may be procured from and submitted at any time to the Executive Secretary of the Committee on Growth, Division of Medical Sciences, National Research Council, 2101 Constitution Ave., Washington 25, D. C.

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MEDICAL SCHOOL RECEIVES KELLOGG GRANT

Two grants for medical education, totalling nearly a quarter of a million dollars, have been announced by the W. K. Kellogg Foundation with the University of Oklahoma School of Medicine slated to receive \$130,000 over a period of five years as one of the schools. The other grant was awarded to the Emory University Medical School, Atlanta, Georgia. Emory will receive \$110,000. The grants will be used to help support certain special programs which the medical schools of each of the two institutions have begun or will place in operation during the academic year 1949-50. The first year's installments on the two grants have been paid.

Cleve Beller, M.D., Oklahoma City, has been appointed director of postgraduate instruction by the Board of Regents of the University of Oklahoma. He will supervise and extend the postgraduate educational facilities offered by the School of Medicine.

The University of Oklahoma will use its grant to aid the development both of graduate and postgraduate programs, each having centralized and decentralized phases. In graduate education, the university has extended affiliation with its medical school to the five hospitals of Oklahoma City and takes a leading role in organizing the educational work for the internes and residents of these institutions, particularly in providing the required instruction in the basic medical sciences.

To be developed during the coming year is a decentralized program of graduate training for general practice. This will provide two years of experience as a "general" resident physician (including the first, or interne, year), with a third year optional. Half of each year will be spent in one of the Oklahoma City hospitals affiliated with the university's medical school

and the other half in one or more hospitals in other parts of the state. Six or eight outlying hospitals are expected to be admitted to the program during the year.

In postgraduate education, the University of Oklahoma medical school is in process of developing, in each of its major departments, a program consisting of one-day-a-month sessions and of three to five-day courses. It expects also to organize during the coming year a decentralized program under which faculty members of the medical school will pay bi-monthly visits to each of six regions into which the state is to be divided and participate in symposia and discussions on medical topics.

Both medical schools will use the Foundation's grant to employ a director of their special program or programs, to pay the expenses of his office, and to provide the additional faculty members that the increased instruction and consultation will make necessary.

In both instances the Foundation's annual contributions are to be reduced toward the end of the five-year period. It is expected that the cooperating hospitals and the medical schools will between them be able to continue the programs unaided.

The University of Oklahoma and Emory University are the third and fourth institutions in which programs of decentralized medical education have received substantial assistance from the W. K. Kellogg Foundation. The first such institution was the University of Michigan, whose program began in July, 1946, and is still being aided. The second, New York University, received the first payment of a three-year grant in December, 1948.

MEDICAL SOCIETIES AROUND THE STATE

JACKSON COUNTY

R. S. Srigley, M.D., addressed the Jackson County Medical Society June 6 giving a discussion of a surgical clinic consisting of thyroidectomies, skin grafting, bone operations, intestinal operations and gall bladder surgery.

CHOCTAW-McCURTAIN-PUSHMATAHA

The tri-county monthly medical and druggists meeting was held at Beavers Bend State park in June with approximately 50 persons attending including physicians, druggists, nurses and aides from the three counties.

OTTAWA COUNTY

The Ottawa County Auxiliary entertained their husbands with a picnic at Dr. and Mrs. M. A. Connell's cabin on Grand Lake recently. Eight physicians and their wives were present.

CARTER COUNTY

The last meeting of the Carter County Medical Society until September was held June 14. A discussion on the blood bank was included on the program and a motion picture on the use of digitalis was shown.

STEPHENS COUNTY

A paper on "System for the Routine Treatment of the Failing Heart" was presented by R. A. Ellis, M.D., at a meeting of the Stephens County Medical Society. Preceding the business meeting, Dr. and Mrs. N. C.

Riley of Marlow and Dr. and Mrs. R. A. Ellis of Duncan entertained the medical society and auxiliary at a dinner at the Chisholm Trail Hotel.

NORTHWEST COUNTIES

The Northwest Counties Medical Society met at Western State Hospital, Fort Supply, June 9 as guests of H. L. Johnson, M.D., superintendent, and the hospital staff. Following a chicken dinner and two piano numbers, a scientific program was presented. R. G. Obermiller, M.D., Woodward read a paper on "The Unrecognized Diabetic" and the paper was discussed by three members of the mental health board from Oklahoma City, Charles F. Obermann, M.D., director, W. W. Ricks, M.D., and Dr. Mark Everett, dean of the medical school. Approximately 50 attended the meeting and special guests were the district winners in the essay contest on the subject "Why the Private Practice of Medicine Furnishes This Country With the Finest Medical Care."

PITTSBURG COUNTY

Members of the Pittsburgh County Medical Society were entertained June 24 at a dinner at the home of Dr. and Mrs. Edward Greenberger. Special guests were George H. Garrison, M.D., O.S.M.A. president, and Dick Graham, executive secretary. They discussed the compulsory health insurance legislation and formation for mode of action of the grievance committee. General discussion of these two subjects followed.



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MEDICAL SCHOOL QUOTA RAISED FOR FRESHMAN CLASS

Eighty Oklahomans have been named to the freshman class of the University of Oklahoma School of Medicine according to Dr. George L. Cross, president of the University.

Until this year, the freshman class has been limited to 64 students. The increase of 16 students was made possible by increased appropriations by the state legislature and by action of the university's board of regents in cooperation with the Council on Medical Education of the American Medical Association.

The appropriations will be used to build a new wing on the Medical School building and to build additions to the out-patient clinics at both the Crippled Children's and University Hospitals. These expansions are needed to provide the educational facilities necessary to allow for the expansion of the entering class.

Thirty-five of Oklahoma's counties are represented in the 1949 class. Only 49 counties were represented by applicants whose qualifications met the minimum entrance requirements. Applicants from 11 other counties failed to present minimum entrance requirements while there were no applicants at all from the remaining 17 counties of the state. The 80 students, all Oklahoma residents, attended a total of 18 colleges, 13 of which are located in Oklahoma while five are out of state schools.

The students accepted for the September, 1949, class are:

Jerome Mark Adams, Colony; Rollie Edward Allen, Lawton; Robert Lee Allisou, Woodward; Robert Owen Amdall, Carnegie; Clanton Ray Athey, Muskogee; Harry Kenneth Bailey, Oklahoma City; Thomas Irwin Baulinger, Ada; Gerald Leroy Beasley, Jr., Tulsa; Wayne Eugene Bennett, Oklahoma City; Robert Dale Boles, Cushing; Mildred Jane Bondurant, Oklahoma City; Earl M. Bricker, Jr., Oklahoma City; Claude Harry Bowles, Sasakwa; Philip Otis Carey, Oklahoma City; Eugene Allen Castle, McAlester; Charles Wesley Cathey, Ardmore;

William Robert Collius, Vinita; Walter Mason Cox,

Lawton; Perry Franklin Crawford, Oklahoma City; Rex Wilson Daugherty, Chelsea; Charles Dail Davenport, Edmond; William Francis Denny, Guthrie; J. C. Devine, Bixby; Bailey Leon Dietrich, Carnegie; Gerald Sherman Dowdy, Jr., Shawnee; Mary Loretta Duffy, Oklahoma City; Allen Boyce Eddington, Tulsa; Raymond Leslie Engles, Durant; William Finis Ewing, Jr., Norman; Thomas Charles Finn, Jr., Tulsa; John Floyd, Bethany; William Smith Harrison, Sand Springs; Joseph Ted Herbelin, Tulsa; Jack Dennis Honaker, Tulsa; Gerald Leon Honick, Newkirk; Luster Irving Jacobs, Hanna; Wiley Price Jeter, Jr., Ada; Burke Lair, Norman; Gerald Andrew Lively, Muskogee; James Russell Lowe, Muskogee; Leroy Lumpkins, Oklahoma City; Frank Lewis Mahan, Panama; Paul Leroy Masters, Tulsa; Howard Paul Mauldin, Shawnee; Benjamin Harrison Moore, Jr., Guthrie; Robert Moore, Hobart; William Richard Moore, Oklahoma City; Robert Fuller Morgan, Semiule; William Leon Morgau, Tulsa; James Otto Morse, Calvin; Donald Geue Morton, Oklahoma City; Jack Ellis Moseley, Muskogee; Jack Merrill McCabe, Oklahoma City;

William Robert McCabe, McAlester; Robert Roy McCarver, Wister; James Riley McFarland, Stroud; Joseph Dunn McGovern, Jr., Seminole; Arthur W. Nunery, Chickasha; Robert John Overstreet, Durant; Jack Walter Parrish, Ponca City; Elmer Dale Peffly, Amorita; Clarence Benton Pinkerton, Wayne; Robert Earl Power, Oklahoma City; Lindberg John Rahhal, Weleetka; Robert Clay Raedeker, Oklahoma City; John Richard Rhiue, Tulsa; J. B. Lowry Satterfield, Bristow; Darrell Arnold Seelig, Tryon; Donald James Sheffield, Tulsa; Carl Walter Smith, Jr., Enid; John James Standifer, Elk City; Robert Mahl Stover, Cardin; Thomas Warren Taylor, Euid; Henry Leo Wall, Oklahoma City; James Albert Webb, Ponca City; Richard Goree Williams, Shawnee; Richard Lee Winters, Stringtown; Walter Henry Whitcomb, Woodward; and Robert Burton Zumwalt, Vinita.

OBITUARIES

CHARLES EDGAR BARKER, M.D. 1881-1949

C. E. Barker, M.D., Oklahoma City, died June 4 in Oklahoma City after practicing there since 1910.

Dr. Barker, was born June 1, 1881 at Pattenburg, New Jersey. When Dr. Barker was three years old he had polio and later tuberculosis interrupted his schooling. He first attended Centenary Collegiate Institute at Hackettstown in New Jersey and later East Academy in Pennsylvania. He then attended Medico-Chirurgical College in Philadelphia (now a part of the University of Pennsylvania) but was forced to quit school because of his health and spent the next few years in Colorado working on a sheep ranch and later attending the Medical School of Denver. Forced to discontinue his education again because of his old malady, he went Wyoming and returned to Denver and received his degree in 1907.

After graduation, he moved to Oklahoma and settled at Tuttle where he practiced for three years before

moving to Oklahoma City. He was county physician for many years and in 1926 he joined Drs. J. E. Harbison and Paul Haskett as owners of what is now Mercy Hospital in Oklahoma City.

H. L. RAINS, M.D. 1880-1949

H. L. Rains, M.D., an Okmulgee physician since 1921, died May 18 in San Antonio, Texas.

Dr. Rains was born January 10, 1880 in Jonesboro, Ark., and practiced medicine there until moving to Okmulgee early in 1921. He obtained his pre-medical work at Ouchita College, Arkadelphia, Ark., and received his medical degree from the Memphis Hospital College.

A veteran of World War I, Dr. Rains served overseas as a first lieutenant in the U. S. army medical corps. He was a member of the American Legion, the Shrine, Bedouin Temple, Muskogee, and a 32nd degree Masou.



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THIRTY-FIVE O.S.M.A. MEMBERS ATTEND THE A.M.A.

Approximately 35 physicians from Oklahoma attended the American Medical Association ninety-eighth annual session in Atlantic City in June. Included among these were O.S.M.A. officers George H. Garrison, M.D., Okla. City, president, and Ralph A. McGill, M.D., Tulsa, president-elect.

At the fifth annual session of the Conference of Presidents and Other Officers of State Medical Associations, C. E. Northcutt, M.D., Ponca City, O.S.M.A. immediate past president, assumed his position as president.

Another Oklahoman, John H. Lamb, M.D., Oklahoma City, was elected secretary of the section of dermatology and syphilology, and Robert M. Shepard, Tulsa, was elected governor of the American College of Chest Physicians for the state of Oklahoma at the fifteenth annual meeting held June 2-5 at Atlantic City. Dr. Shepard's term will extend for a period of three years.

Elmer L. Henderson, M.D., Louisville, Ky., who has been active in A.M.A. affairs for more than a decade, was named president elect. Ernest E. Irons, M.D., Chicago, is the new president. Members of the board of trustees are Louis H. Bauer, M.D., Hempstead, N. Y., 1954; and F. J. L. Blasiugame, M.D., Wharton, Texas, 1954.

Scores of resolutions were introduced in the House of Delegates during the five-day session. The House of Delegates approved sponsorship of a National Health Conference in the late summer or early fall to implement the A.M.A.'s 12-point health program.

The House of Delegates endorsed the continuation of the National Education Campaign under the direction of Whitaker and Baxter. No action was taken on bringing about another special assessment or creating any dues although this may be considered at the interim session in Washington in December.

Seale Harris, M.D., Birmingham, Ala., professor emeritus of medicine at the University of Alabama, former editor of the Southern Medical Journal and past president of the Southern Medical Association, received the A.M.A.'s 1949 Distinguished Service Medal.

It is suggested that all members of the Oklahoma State Medical Association read in the Journal of the American Medical Association the complete minutes of the House of Delegates in order that they may be kept abreast of the action of the Delegates concerning social, economic, political and scientific matters affecting the profession.

Oklahoma physicians registered at the A.M.A. included: John F. Burton, Oklahoma City; W. Albert Cook, Tulsa; George H. Garrison, Oklahoma City; L. D. Hudson, Dewey; Bernard Lowenstein, Shawnee; H. M. McClure, Chickasha; Ralph A. McGill, Tulsa; Philip M. McNeill, Oklahoma City; C. E. Northcutt, Ponca City; C. L. Oglesbee, Muskogee; Malcom Phelps, El Reno; Homer A. Ruprecht, Tulsa; Marcella Steel Ruprecht, Tulsa; Henry H. Turner, Oklahoma City; C. E. Williams, Woodward; John Powers Wolff, Oklahoma City; W. T. Andreskowski, Ryan;

G. E. Johnson, Ardmore; J. Franklin Garrell, Tulsa; Edward D. Greenberger, McAlester; Phillis E. Jones, Oklahoma City; Joseph W. Kelso, Oklahoma City; Garnet A. Kilpatrick, Heuryetta; Joseph C. Macdonald, Oklahoma City; J. B. Miles, Anadarko; George L. Tracewell, Okmulgee; Arnold H. Ungerman, Tulsa; Claude Bryan Waters, Pawnee; Neil W. Woodward, Oklahoma City; Beverly C. Chatham, Chickasha; Lucien Pascucci, Tulsa; H. Boyd Stewart, Tulsa; Lois L. Wells, Oklahoma City; and John H. Lamb, Oklahoma City.

ANNOUNCEMENTS

AMERICAN ACADEMY OF GENERAL PRACTICE. 1950 scientific assembly will be held in St. Louis, Mo., February 20, 21, 22 and 23. Headquarters will be the Kiel Auditorium.

OKLAHOMA CITY CLINICAL SOCIETY. Biltmore Hotel, October 24, 25, 26, 27, 1949, Oklahoma City.

UNITED STATES CIVIL SERVICE COMMISSION. A medical officer examination for filling rotating intern

psychiatric resident and surgical resident positions in St. Elizabeth's Hospital, Washington, D. C. has been announced. To qualify, applicants must be third or fourth-year students in an approved medical school. Applicants for psychiatric resident and surgical resident positions must be graduates of a medical school with a degree of doctor of medicine, and must have completed a full year in an approved rotating internship. Applicants for surgical resident must have completed three full years as residents-in-training in surgery in an approved residency.

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HAVE YOU HEARD?

J. A. Rieger, M.D., Norman, Grady Matthews, M.D., Oklahoma City, Charles Leonard, M.D., and Charles Smith, M.D., both of Oklahoma City, attended a meeting of the American Psychiatric Association in Montreal, Canada, recently.

D. B. Ensor, M.D., Alva, discussed youth problems before the Kiwanis club of that city.

James K. Gray, M.D., Stillwell, now serving on Guam with the air force, has been promoted to lieutenant colonel.

William H. Aaron, M.D., Pawhuska, was recently honored on his birthday with an annual birthday dinner given by friends in Pawhuska.

Dr. and Mrs. A. L. Dougan, Carmen, recently celebrated their fiftieth wedding anniversary.

R. B. Gibson, M.D., Ponca City, spoke to the eighth district nurses association at their last meeting until fall.

J. H. Goldberger, M.D., El Reno, attended a school on allergies of the nose and throat held in St. Louis in June.

Bill J. Simon, M.D., formerly of Alva, and Raymond Dougherty, M.D., Oklahoma City, have recently opened offices in Perry.

Charles E. Green, M.D., Lawton, has been named consultant in pediatrics at Kiowa Indian hospital, Lawton.

Earl Mabry, M.D., Enid, has been elected president of the Enid Exchange club.

Vernon Merrifield, M.D., Ponca City, has been elected president of the American Business club.

Bart Woolridge, M.D., has recently established his practice in Altus.

Mark D. Holcomb, M.D., Enid has been named vice-chairman of the Garfield county Red Cross chapter.

L. C. Northrup, M.D., Tulsa, has been certified as a specialist in obstetrics by the International Board of Surgery. He is the only Oklahoma physician to have received the honor.

Margaret Hudson, M.D., Tulsa, has been elected chairman of the health section of the Council of Social Agencies of that city.

Charles W. Watson, M.D., Tulsa, has been awarded a three-year fellowship to carry on clinical research in neurology at Boston City hospital and Harvard medical school.

J. B. Tolbert, M.D., Mountain View, has been named ward three commissioner there.

O.S.M.A. members I. W. Bollinger, M.D., and G. Y. McKinney, M.D., Henryetta, received 20 year charter chevrons at a recent Lions Club meeting in that city.

F. C. Buffington, M.D., Norman, was named chief of staff of the Norman Municipal Hospital.

D. D. Pierson, M.D., Mangum, was elected chairman of the medical staff of the Southwest Baptist hospital.

Joe L. Duer, M.D., Woodward, discussed the new preceptorship plan of the University of Oklahoma School of Medicine at the Woodward weekly chamber of commerce luncheon.

William T. Gill, M.D., Ada, discussed compulsory health insurance for Okmulgee Rotarians recently.

Willis Johndahl, M.D. is now associated with the Hardy sanitarium in Ardmore.

Malcom E. Phelps, M.D. and Mrs. Phelps, El Reno, had North Carolina's chief executive, Gov. W. Kerr Scott, and members of his party as their overnight guests recently.

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OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES

OKLAHOMA STATE MEDICAL ASSOCIATION

May 15, 1949

Tulsa, Oklahoma

MINUTES OF THE FIRST SESSION

The first session of the House of Delegates of the Oklahoma State Medical Association was called to order by the Speaker of the House, L. Chester McHenry, M.D., Oklahoma City, on Sunday, May 15, 1949, at 2:00 P.M. in the Ivory Room of the Mayo Hotel, Tulsa, Oklahoma.

The meeting was opened with the invocation given by W. M. Galaher, M.D., of Shawnee.

The Speaker called upon A. R. Sugg, M.D., Ada, Chairman of the Credentials Committee, for a report. Dr. Sugg reported that he and the members of the Committee had marked the Delegates and representative Alternates present and that there was a quorum.

The reading of the minutes of the last meeting of the House of Delegates, May 16, 1948, was called for, and the following motion was made after the statement by the Speaker that the minutes had been published in the *Journal* immediately following the 1948 meeting. It was moved by Bruce Hinson, M.D., Enid, seconded by W. A. Howard, M.D., Chelsea, that the minutes be accepted as published. The motion carried.

The Speaker announced that the following delegates were appointed to the Reference Committees:

1. Constitution and By-Laws Committee—W. J. Sayles, M.D., Miami, Chairman; W. T. Gill, M.D., Ada; E. H. Shuller, M.D., McAlester.

2. Resolutions Committee—Austin Bell, M.D., Oklahoma City, Chairman; Bruce Hinson, M.D., Enid; James Stevenson, M.D., Tulsa; W. N. Weaver, M.D., Muskogee; Roy L. Fisher, M.D., Frederick.

3. Tellers—McLain Rogers, M.D., Clinton, Chairman; Eugene Arrendell, M.D., Ponca City; S. A. Lang, M.D., Nowata.

4. Sergeants-at-Arms—Ned Burleson, M.D., Prague; C. M. Hodgson, M.D., Kingfisher.

The Speaker of the House requested a special order of business, namely, that of redistricting the State Association. The Speaker advised the House that a special committee of the immediate five past presidents still living had presented the redistricting proposal to the House of Delegates at the May 16, 1948 meeting, and that the House of Delegates had approved the redistricting in principle subject to the subsequent approval of the individual County Societies. The Speaker advised the House that the County Societies had been contacted and the only change requested by a County Society was the placing of Beckham County in District 5 instead of District 14, and that each delegate prior to the meeting of this House of Delegates had been forwarded complete information on the redistricting proposals. The Speaker further commented to the House that it would be necessary for the House of Delegates to make this proposal a special order of business, inasmuch as should the House favorably consider it, it would subsequently call for an amendment to the By-Laws, which would have to be introduced at this session and lay on the table until the second session. It would also necessitate the election of Councilors and

Vice-Councilors from each of the new districts and to accomplish this latter purpose, each Councilor District would have to caucus in order to determine their nominees for Councilor and Vice-Councilor.

F. M. Adams, M.D., Vinita, made the following motion: "I move that the House of Delegates request a special order of business considering redistricting and an amendment to the By-Laws necessary to carry that out." The motion was seconded by W. S. Larrabee, M.D., Tulsa, and carried.

The Speaker called upon W. J. Sayles, M.D., Miami, Chairman of the Constitution and By-Laws Committee, to present the following amendment to the By-Laws on the matter of redistricting of the Councilor Districts:

Chapter IV—Councilor Districts and Councilors

The entire contents of Chapter IV to be deleted and the following inserted in lieu thereof:

"Section 1. Apportionment

The State of Oklahoma is divided into fourteen (14) Councilor Districts and the counties allotted to each of such districts are as follows:

District No. 1—Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, Washington.

District No. 2—Kay, Noble, Osage, Pawnee, Payne.

District No. 3—Garfield, Grant, Kingfisher, Logan.

District No. 4—Alfalfa, Beaver, Cimarron, Ellis, Harper, Major, Texas, Woods, Woodward.

District No. 5—Beckham, Blaine, Canadian, Custer, Dewey, Roger Mills.

District No. 6—Oklahoma.

District No. 7—Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, Seminole.

District No. 8—Tulsa.

District No. 9—Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner.

District No. 10—Haskell, Hughes, Latimer, LeFlore, Pittsburg.

District No. 11—Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha.

District No. 12—Carter, Garvin, Johnston, Love, Marshall, McClain, Murray, Pontotoc.

District No. 13—Caddo, Comanche, Cotton, Grady, Jefferson, Stephens.

District No. 14—Greer, Harmon, Jackson, Kiowa, Tillman, Washita.

"Section 2. Term of Councilors.

(a) During the Annual session of 1949, Councilors and Vice-Councilors for the districts outlined in Section 1 of this Chapter shall be elected for the following terms:

Districts 1, 4, 7, 10, and 13 for one (1) year.

Districts 2, 5, 8, 11, and 14 for two (2) years.

Districts 3, 6, 9, and 12 for three (3) years.

(b) After 1949, Councilors and Vice-Councilors whose terms expire shall be elected for terms of three (3) years each and shall serve until their successors are elected and qualified.

Section 3. Change of Districts

The House of Delegates, by vote of two-thirds of the delegates present at an Annual Session, may change the composition of any one or more of the Councilor Districts."

After the reading of the amendment, it was *moved* by W. J. Sayles, M.D., Miami, *seconded* by W. S. Larrabee, M.D., Tulsa, that the House of Delegates approve this proposed amendment to the By-Laws. The motion *carried* unanimously.

The next item of business before the House was the nomination of officers of the Association. The Speaker stated that the By-Laws of the Association as stated in Chapter V, Section 2, call for nomination in the first session, with election (Chap. V, Sec. 3) to be held at the second session of the House of Delegates. The Speaker announced the time of election to be at 8 o'clock or as near thereafter as possible, in the evening, at the second session. The officers to be elected included: President-Elect, Vice President, Secretary-Treasurer, Delegate to the American Medical Association, and Alternate-Delegate to the American Medical Association. The Speaker then declared the House of Delegates open for nominations for President-Elect.

Onis G. Hazel, M.D., Oklahoma City, nominated Ralph A. McGill, M.D., Tulsa, as candidate for President-Elect of the Oklahoma State Medical Association. The nomination was *seconded* by Ned Burleson, M.D., Prague. A *motion* was then made by Eugene Arrendell, M.D., Ponca City, *seconded* by L. C. Kuykendall, M.D., McAlester, that nominations close. The motion *carried* unanimously.

The Speaker then called for nominations for Vice-President. C. M. Hodgson, M.D., Kingfisher, nominated H. Violet Sturgeon, M.D., Hennessey, as Vice-President. It was *moved* by Clinton Gallaher, M.D., Chawnee, *seconded* by Ned Burleson, M.D., Prague, that nominations be closed. The motion *carried* unanimously.

Nominations were declared open by the Speaker for Secretary-Treasurer to the Association. L. C. Kuykendall, M.D., McAlester, nominated Lewis J. Moorman, M.D., Oklahoma City, as Secretary-Treasurer. The nomination was *seconded* by W. A. Howard, M.D., Chelsea. It was *moved* by O. C. Newman, M.D., Shattuck, *seconded* by Bruce Hinson, M.D., Enid, that nominations be closed. The motion *carried* unanimously.

The Speaker then called for nominations for Delegate to the American Medical Association. L. H. Ritzhaupt, M.D., Guthrie, nominated Malcom Phelps, M.D., El Reno, as a Delegate to the American Medical Association. The nomination was duly *seconded*. Austin Bell, M.D., Oklahoma City, nominated John F. Burton, M.D., Oklahoma City. Eugene Arrendell, M.D., Ponca City, nominated C. E. Northcutt, M.D., Ponca City. Bruce Hinson, M.D., Enid, moved that nominations be closed. The motion was *seconded* by W. A. Howard, M.D., Chelsea, and *carried*.

The Speaker stated that the House of Delegates could either make separate nominations for Alternate-Delegates to the A.M.A., or a motion could be made that the runner-up in the election for delegate be made Alternate Delegate.

E. W. Bollinger, M.D., Henryetta, moved that the runner-up automatically be the Alternate-Delegate. The motion was *seconded* by Eugene Arrendell, M.D., Ponca City, and *carried*.

Following the nomination of officers, the Speaker called upon the officers of the Society for reports of the past year's activities. President C. E. Northcutt, M.D., Ponca City, was recognized by the Speaker and said:

"You have undoubtedly read the reports of all the Councilors which have been published, and if so, I would *move* that the published reports of the Councilors be accepted." The motion was *seconded* by E. H. Shuller, M.D., McAlester, and *carried*.

The Speaker then called for a report from the A.M.A. Delegates. C. R. Rountree, M.D., Oklahoma City, Delegate to the A.M.A., was not present, due to the necessity of his appearing in Denver, Colorado at this same time. James Stevenson, M.D., Tulsa, the other Delegate to the A.M.A., made the following report:

"At the interim session in St. Louis which was held a few months ago, some very important things came up. Of course the House of Delegates, as you know, again took a firm stand against Compulsory Health Insurance. A number of other bills, the Lister Hill Bill and Senator Taft's, will be considered at the meeting in Atlantic City. If the members of the House of Delegates have any ideas about these bills in particular, the delegates would be helped by such information as you can give them.

"The A.M.A. has been cognizant for a long time about the demands of the army for increased personnel. The A.M.A. has had a very active committee in this field, and every effort is being made to meet the demands of the military services without resorting to a draft law. The Committee recognizes that the Army does need more doctors. The A.M.A. is devoting every effort to getting them, particularly those physicians who have been educated at government expense and who have served no time in the army. Another problem the A.M.A. is aware of is the problem of rural medical care. The A.M.A. has an extremely active committee, headed by Dr. Crockett, of Lafayette, Indiana, who has devoted his time to holding meetings with farm groups, country doctors, and rural people, in order to attempt to solve the problem of rural medical care.

"An A.M.A. liaison committee has been established between Red Cross blood banks of the country and the A.M.A. The A.M.A. and the Red Cross are very much closer linked together than they have been, due to meetings between this committee and Red Cross officials. The Red Cross has assured us that they will not enter a county unless the County Medical Society endorses the blood bank program. This program is working out very well because the Red Cross people are very cooperative.

"A better report can be given after the meeting in Atlantic City. May I assure each member of the House of Delegates that your delegates to the American Medical Association will make every effort to represent your Association in an honorable and conscientious way."

F. S. Etter, M.D., Bartlesville, *moved* that the House of Delegates go on record as opposing the Federal Government having anything to do whatsoever in the practice of medicine. The motion was *seconded* by S. A. Lang, M.D., Nowata.

General discussion followed this motion, and it was the consensus of opinion that the motion as stated would bear further thought and consideration to effect a more encompassing wording. The following *motion* was then made by L. H. Ritzhaupt, M.D., Guthrie: "I move that we table the motion until some future time." The motion was *seconded* by W. A. Howard, M.D., Chelsea, and *carried*.

The Speaker next called upon C. E. Northcutt, M.D., Ponca City, for the report of the Council. Dr. Northcutt in turn requested the Executive Secretary, Mr. Graham, to read the Council Report, which is as follows:

COUNCIL REPORT**1949-50**

In submitting this report the Council again desires to point out that the actions of this House of Delegates will govern the channels in which the profession in Oklahoma will move during the coming year.

Since any policies and programs adopted by the House of Delegates must be activated by the County Societies, it therefore becomes the duty of the Delegates to report the action of this House of Delegates to their respective County and District Societies.

As a premise from which to work and think, your Council calls to your attention that there are many organizations interested in raising or lowering taxes, etc., but it is doubtful if any other organization in Oklahoma except this one you represent today, is very much interested in how medicine is practiced in the State of Oklahoma. Therefore, our fight for free enterprise in our profession comes as a direct challenge to each of us.

Your Council would point out to each of you in addition to the usual activities engaged in by your Association, there are many pressing problems confronting the profession in which we must at all times be alert and ready to participate and help.

While 1949-50 will not be an election year except for certain national congressional offices, the problems at the national level will no doubt increase. Problems concerning military service, medical education, public health, and a continuation of better medical care for all the people will call for the profession interest, help, cooperation, and guidance. Above all else, we must not lose sight of the most important of all public relations concepts, which, of course, is that of the daily relationship of the physician with his patient.

Your Council makes the following report on its stewardship for the past year and certain recommendations for the House of Delegates to consider as a program for the coming year.

Membership

The membership of the Association as of May 10, 1949, was 1,379 compared to 1,376 on the same date in 1948, a net gain of three. The Association also has 47 Honorary members, 16 Life members, 8 Associate members, and 14 Junior and Service members, giving a total membership as of May 10th of 1,464.

At the 1948 session of this House of Delegates your Council urged each County Medical Society to appoint a membership committee, the function of the committee to bring all eligible physicians residing in the jurisdiction of the County Society into its membership. Many Societies followed this recommendation with fine results. Others have not. Your Council again urges all County Societies who do not have such committees to immediately appoint some and request that they function.

FINANCES

Finances of the Association have caused some concern. While the Association has sufficient funds on which to operate in the total aggregate, the action of the Council and the House of Delegates in dividing the funds of the dues between the general funds of the Association and the Public Policy Committee in the amounts of \$20 and \$22 respectively has created a deficit in the general funds of the Association and a surplus in the funds of the Public Policy Committee. Your Council has studied this problem and in consultation with the Public Policy Committee has arrived at a mutual agreement for the adjusting of this de-

ficiency. The Council has been privileged to see that report of the Public Policy Committee and approves the report. Further reference to the funds available to operate the Association will be made with the submission of the budget.

The Council recognizes that it is the obligation of the House of Delegates to set the dues for membership in the Association for the coming year. Your Council, after considering the needs of the Association to combat compulsory health insurance and to carry on the general work of the Association in the fields of Post-Graduate work, Public Health, Insurance, and the many other activities, recommends that the dues for 1950 be the same as 1949 — \$42.00, this sum to include the money to be used by the Public Policy Committee.

Your Council recognizes, as well as does any delegate, that this is no decrease and regrets that such is the case. On the other hand, your Council feels that the profession might as well face the facts that so long as there is the threat of a change in the manner in which the health of the people will be treated by the profession that the activities of the Association in the protection of the public will call for financing.

BUDGET

In compliance with Article IX, Section 2 of the Constitution, the Council submits the following budget for the year 1950. As has been pointed out in each subsequent Council report, dues must be set one year in advance of known budget requirements, and for this reason the accuracy of the budget is of doubtful value. The budget herewith submitted is predicated on anticipated *Journal* revenue and with the dues remaining at \$42.

Revenue over expenditures for January 1, 1948 to December 31, 1948 was \$9,099.16, but there was an operating loss on the general activities of the Association of \$1,959.37. The excess of \$9,099.16 represents funds in the hands of the Public Policy Committee, which your Council elsewhere in this report recommends be adjusted with the general funds of the Association. Your Council also regrets to announce that *Journal* revenue was down \$2,644.07, which was another factor in the deficit.

The budget submitted includes all anticipated expenditures, including activities of the Public Policy Committee.

BUDGET**Revenue**

| | |
|---------------------------------------|-------------|
| Dues, 1350 members @ \$42.00 | \$64,700.00 |
| Interest on Investments | 302.00 |
| Total | \$65,002.00 |
| Journal advertising 1949, \$13,762.93 | |
| Less 15% anticipated loss | 11,645.00 |
| Grand Total | \$76,647.00 |

Expenditures

| | |
|--|-------------|
| Annual Meeting | \$ 2,000.00 |
| Post-Graduate Committee | 2,000.00 |
| American Medical Association (Delegates, etc.) | 1,500.00 |
| Directory | 1,500.00 |
| Auditing | 300.00 |
| Dues and subscriptions | 100.00 |
| Employees Insurance | 200.00 |
| Journal | 10,000.00 |
| Office Supplies | 3,000.00 |
| Postage | 3,000.00 |
| Press Clipping | 200.00 |

| | |
|-------------------------------|-------------|
| Salaries | 29,500.00 |
| Travel | 2,500.00 |
| Rent | 3,000.00 |
| Telephone & Telegraph | 1,500.00 |
| Stationery & Printing | 500.00 |
| Miscellaneous Expense | 2,500.00 |
| Unemployment Insurance | 300.00 |
| Public Policy Committee | 12,000.00 |
| Total | \$75,600.00 |
| Income | \$76,647.00 |
| Disbursements | 75,600.00 |
| Surplus | \$ 1,047.00 |

PUBLIC RELATIONS PROGRAM

Your Council has seen and studied the report of the Public Policy Committee and approves the report.

A. M. A. EDUCATIONAL PROGRAM

While this subject is included in the report of the Public Policy Committee, your Council cannot refrain from making comment. Your Council is fully aware that in the past there have been criticisms of the American Medical Association, and such criticisms at times no doubt were justified. However, your Council is firmly of the opinion that a definite change and renovation has taken place within the A.M.A., and that not only does the A.M.A. deserve the support of each of us, but must have this support if it is to succeed in its educational program to the American people.

Your Council has heard statements made that the money raised by the Special Assessment will be used for lobbying purposes. Your Council knows otherwise. Most of you individually have already received sufficient literature from the A.M.A. to be acquainted with its program. Each of you also knows that a special meeting of this House of Delegates unanimously endorsed the program and made the assessment of the A.M.A. an assessment of the Oklahoma State Medical Association. As of May 10, 953 members of the Association had paid the assessment. Of the 54 counties and districts, no assessments had been received from eight Societies, and on the other hand, 12 Societies were 100 per cent. These are: Alfalfa, Beckham, Blaine, Cotton, Garvin, Grant, Jefferson, McIntosh, Rogers, Texas, Tillman, and Woods.

Your Council urges each of you to return to your County Societies and complete the collection of this assessment, in order that the Oklahoma State Medical Association can be 100 per cent. The people are looking toward the profession for educational leadership and every physician should know that this feeling on the part of the public will inure to his own benefit.

WOMAN'S AUXILIARY

Continuing in the vein of public relations, your Council would call to the attention of the House of Delegates the excellent work which is being done by the Auxiliary. Their organization program is almost complete, and each county and district society is urged to give the Auxiliary its 100 per cent cooperation. Any county or district society not now having an Auxiliary should take immediate steps to secure one.

GENERAL ACTIVITIES

Prior to recommending a program for 1949-50 your Council would like to mention a few activities of the Association and make comments and recommendations concerning these activities.

MEDICAL EDUCATION

Your Council feels that in this field the profession will continue to endorse the increasing of medical educational facilities for the education of medical students. Your Council would point out that in too many cases

the general public is of the opinion that organized medicine is opposing such increases when in reality the Oklahoma State Medical Association has at each session of the legislature urged that sufficient appropriations be made to the medical school to accomplish this purpose.

POST-GRADUATE EDUCATION

The Post-Graduate Committee is due commendation for its continued work in bringing medical education to the local area. Your Council has been tentatively advised there is some doubt that the Commonwealth Fund will continue to give financial support after the completion of the course in Internal Medicine, which will begin this coming July.

Your Council urges that the County Societies give their complete support to the coming course and at a future date determine the extent to which its individual members would financially support the program.

MILITARY SERVICE

The House of Delegates is already keenly aware of the urgent request of the military forces for physicians to volunteer to serve, with special emphasis being placed on those physicians who were trained at government expense and have not served in the military forces. Your Council believes that these physicians should respond to the request of the government, and if all voluntary efforts fail, that the government would be justified in enacting a draft law. Your Council, however, does believe that the American Public has a call on the profession to care for its health, ills, and for this reason memorializes the Armed Services that their requests for physicians should be for only the number needed to render professional care to the military personnel and not for administrative duties.

Your Council has already adopted a resolution that will be communicated to the County Societies emphasizing its stand, but with the further admonition that those physicians in the larger populated areas where their services are not essential be the first to respond.

COUNTY MEDICAL SOCIETIES

Your Council would call to the attention of the House of Delegates that at its last meeting amendments to the Constitution and By-Laws were adopted specifying that all county and district medical societies must have a minimum number of members of five and ten respectively, and the House of Delegates urged the amalgamation of all societies not meeting these requirements with another county or district society; in addition, all county and district medical societies should either review and modernize their Constitution and By-Laws or adopt new ones and apply for a charter within six months. Of the 54 County and District Societies, only 33 have submitted their Constitutions and By-Laws and are in a position to be chartered. In addition, there are only two County Medical Societies who do not meet the requirements of the Constitution and By-Laws or have made no effort to amalgamate with another Society. The Council recommends these two Societies (Grant-Harmon) be urged to amalgamate before they are declared to no longer exist as County Societies.

REDISTRICTING OF COUNCILOR DISTRICTS

Each delegate has received a map and letter concerning the redistricting of the Association into 14 councilor districts instead of ten. This proposal was recommended by a special committee at the last session of the House of Delegates and has had the approval of the county and district societies at Councilor Districts' meetings held during 1948.

Your Council commends the House of Delegates for its actions in approving this change and urges the

delegates from the respective newly-created districts to give careful consideration to the nominations they make in their caucuses for election of their councilors and vice-councilors. The Council realizes more than anyone else the responsibility of its membership.

AMENDMENTS TO CONSTITUTION AND BY-LAWS

Since the last meeting of the House of Delegates there have been additional changes needed for the Constitution and By-Laws to conform to a modernization of the Association. The Council has been privileged to see these proposed amendments submitted to the Council prior to this session of the House of Delegates and gives its endorsement to them.

FIFTY YEAR IN-PRACTICE RECOGNITION

Your Council wishes to compliment the House of Delegates for its far-sightedness in authorizing the issuing of an appropriate pin to all members of the Association who have been in practice more than fifty years. Thirty members have been so honored in the past year. They are as follows:

J. B. Clark, M.D., Coalgate
 Sam McKeel, M.D., Ada
 W. D. Baird, M.D., Oklahoma City
 John A. Reck, M.D., Oklahoma City
 W. W. Turlington, M.D., Seminole (deceased)
 J. S. Fulton, M.D., Atoka
 J. M. Postelle, M.D., Oklahoma City
 W. A. Tolleson, M.D., Eufaula
 J. L. LeHew, M.D., Pawnee
 Ralph V. Smith, M.D., Britton (deceased)
 W. W. Rucks, M.D., Oklahoma City
 O. W. Rice, M.D., McAlester
 John Allison, M.D., Tahlequah
 J. V. Athey, M.D., Bartlesville
 J. P. Beam, M.D., Arnett
 S. L. Burns, M.D., Stonewall
 W. Albert Cook, M.D., Tulsa
 P. H. Mayginnnes, M.D., Tulsa
 Walter Hardy, M.D., Ardmore
 H. A. Higgins, M.D., Ardmore
 Thad C. Leachman, M.D., Woodward
 C. M. Maupin, M.D., Waurika
 Frank H. Norwood, M.D., Prague (posthumously)
 D. P. Richardson, M.D., Union City
 C. E. Sexton, M.D., Stillwater
 Augustin H. Shi, M.D., Stratford
 C. W. Tedrowe, M.D., Woodward
 J. P. Torrey, M.D., Bartlesville
 Ray Holbrook, M.D., Perkins
 Floyd Watterfield, M.D., Muskogee

The following physicians will have this recognition accorded them in the near future:

J. E. Harbinson, M.D., Oklahoma City
 Jesse L. Blakemore, M.D., Muskogee
 L. D. Bruton, M.D., Muskogee
 J. Hutchings White, M.D., Muskogee
 M. K. Thompson, M.D., Muskogee
 W. R. Joblin, M.D., Porter

The House of Delegates will recall that the first awards were made at the President's Inaugural Dinner Dance in 1948. Since that time all requests have been for the ceremonies to be in the physician's home community and for the reasons that are obvious. For this reason no future awards are contemplated at the Annual Dinner Dance.

Each County Society is urged to review its membership to ascertain if any physician qualifies for this honor and to communicate his name to the Executive Office.

PRE-PAYMENT HOSPITAL AND MEDICAL CARE PLANS

The House of Delegates at its 1948 Annual Meeting requested the Blue Cross and Blue Shield Plans to make a report to the House of Delegates at this session concerning their development and any contemplated change in their operations. Such a study has been made and the report of the Blue-Cross-Blue Shield Plan is as follows:

EXTENSION OF BLUE CROSS AND BLUE SHIELD IN OKLAHOMA

April 29, 1949

The question of prepaid health programs on a voluntary basis in America is now experiencing a constant changing scene. Approaches to the problem by various elements in our system make it almost imperative that the voluntary agencies and their sponsors maintain a very flexible position in order to cope with these changing demands.

At this time there are several proposals at the national level involving legislation by the national government. No one can tell what the final result will be — whether it will be a complete program, a modified program, or no program. This points up several pertinent facts to those of us interested in this prepayment movement in Oklahoma. (1) Our Blue Cross Plan is a service plan, while our Blue Shield Plan is an indemnity program. If anything comes out at the national level, it is not likely that an indemnity program will be acceptable on any basis. It will require the provision of services by the members of the profession rather than an indemnity to apply on services. (2) It is quite probable that any program that may be effected will require complete service for the medically indigent because it is not likely that a partial program will be acceptable to the sponsors at the national level.

For these reasons, it would probably be discreet for all of us to think carefully about these subjects and be prepared to move quickly in order to meet the challenge.

The general subject of Blue Cross and Blue Shield extension in Oklahoma should probably be considered under two headings: (1) The extension of services, and (2) increased enrollment.

INCREASED SERVICES

Blue Cross benefits at this time are thirty days of hospital care each contract year in semi-private accommodations. Limitations are exclusion of pulmonary tuberculosis, mental and nervous conditions, and cases covered by Workmen's Compensation. These are excluded because they are presumably provided by tax-supported institutions. Private room, X-Ray, anesthesia, special laboratory, and streptomycin are paid for by the member and are not included in the benefits. The dues paid by Blue Cross members today are not adequate to absorb any increased benefits. Increasing the benefits would necessitate increasing the dues.

Blue Shield services at this time include surgery (any cutting operation), obstetrical care (after ten month's membership), broken bones, dislocations, anesthesia, X-Ray (in accident cases only). The benefits mentioned, according to our present experience, are all that can be provided under the present dues. Extending benefits would necessitate increasing dues. The benefits provided by Oklahoma Blue Shield include all those tested and found to be actuarially sound. Any extension of benefits would involve going into services that are still in the experimental stage as far as experience is concerned. Some Plans are now experimenting with providing medical care in hospitalized cases where surgery is not in-

volved. Some Plans say it is working fine; others say it is not practical and cannot be done due to abuses by the patient and the members of the profession. A study of Blue Cross medical cases for the year 1948 reveals that if applied to Blue Shield, it would require a 30 per cent increase in dues to provide \$3.00 a day for 30 days for medical care in hospitalized cases.

The extent to which the attending physician, and in some respects the hospital, protect the Plans from abuse will determine in a large measure our ability to extend the services of the program. The following observation is interesting. The national average of hospital admissions is 122 out of 1000. In Oklahoma, it is 137, which means that for every 1000 members belonging to the Plan, Oklahoma Blue Cross pays 15 more hospital cases than the average of other Plans. If the rate of admission were down to the average, it would perhaps be possible to provide additional benefits.

INCREASED ENROLLMENT

Some counties have a rather high percentage of their population enrolled; others, a very low percentage. There are perhaps several reasons for this condition. The main one is that high enrollment is in direct proportion to the cooperation we receive in the local community from hospitals, doctors, and civic leaders. Some counties with very low enrollment do not have a hospital; they have very few medical doctors; there is very little local machinery for us to tie to in which to create interest and membership in this program. If the Enabling Act before the legislature is passed, it is our feeling that there will be a substantial step-up in our enrollment activity because our community enrollment activity for smaller towns, and in some cases for the entire county, is just now beginning to gather momentum. In this connection, we want to mention that to date, no Plan has successfully worked out a complete answer to the rural enrollment problem, but we hope the technique being employed in Oklahoma will produce the desired results, if given time.

An approach is now being made to the enrollment of 90,000 old-age assistance people in Oklahoma, who at this time are complete medical indigents. If this effort is made to work, it will be a big step forward and will serve as an incentive to work out a solution for other medically indigent groups.

General economic conditions have had a bearing upon our activity during the past five years. . . we have been active in a booming economy. Now we are approaching an adjustment in that economy, and as yet, no one knows what effect that will have upon our membership. There are two significant questions in this connection. First, what will the public pay for a prepaid health program, and, second, what priority will the program receive in the individual family budget in a declining economy? That is, will they drop it when the shoe begins to pinch a little bit?

Please understand that the foregoing statements are the opinion of the management of Blue Cross and Blue Shield, and do not necessarily reflect the opinions of the Boards of Trustees.

Your Council calls to the attention of the House of Delegates the comments in this field made by the Public Policy Committee and recommends that a special committee be appointed by the President to study the problems involved and the feasibility of both a cash indemnity and service-type contract.

MAL-PRACTICE INSURANCE

Your Council reports to this House of Delegates that as of May 10, there were over 900 members of the Association enjoying the rate schedule of the master contract held with London and Lancashire. However, your insurance committee has reported an increasing number of malpractice suits. Unless the profession will recognize its responsibilities in this field, there can be nothing done to combat a raise in the insurance rate. Your Council would also urge each of you to evaluate your coverage and to be certain it is adequate.

VETERANS ADMINISTRATION HOME-TOWN MEDICAL CARE PROGRAM

Your Council wishes to commend the Veterans Medical Care Committee for its excellent work in the operation of this program. Your Council would like to make special acknowledgement of the time and effort being put into this program by the Consultants Committee in both Muskogee and Oklahoma City. It is believed this program is giving the veteran the best possible medical care, utilizing local physicians and facilities.

ANNUAL MEETING

Your Council would bring to the attention of the House of Delegates that the Annual Meeting has grown each year and has reached a place where it is becoming extremely difficult to house the Convention in hotels. Your Council is investigating the possibility of moving the Annual Meeting to Convention Halls and urges the Delegates to cooperate if such a move should materialize.

RESOLUTIONS

Numerous resolutions will no doubt come before this House of Delegates for its consideration. While many may believe that resolutions have little force and effect, such is not the case. Your Council recommends that each delegate give his most earnest consideration to the resolutions and feel free to discuss each of them.

1949-50 PROGRAM

Your Council is keenly aware of the responsibility of recommending a program for the ensuing year and accepts this responsibility with the full realization of the import of its recommendation.

Your Council recommends that this House of Delegates reaffirm and endorse the principles and objectives established by this House of Delegates at its 1948 session:

1. Adequate medical care and health services for all people.
2. An extension of public health services in the prevention of disease.
3. The establishment of a State Health Planning Board.*
4. A closer liaison with the allied professions and the consumer in accomplishing these objectives.

*See amendment by the House, P. 16, par. 5.

In discussing the first objective, your Council recognizes that adequate medical care and health services for all the people presents an age old problem that probably in the strict sense of the word will never be solved but certainly the present situation can be improved upon. We must not be unmindful that certain segments of our federal government would like to attempt to solve this problem for the people at the taxpayers expense. As recently as May 5, President Truman reiterated his plea for compulsory health insurance. To start an attack on this problem your Council recommends the following:

1. That the University of Oklahoma School of Medicine immediately study its functions in preparing physicians for the practice of medicine and its obligation to the State of Oklahoma to investigate locally the students applying for admission insofar as possible.
2. That the University of Oklahoma School of Medicine study its policy of education as it pertains to the specialized fields versus general practice.
3. That this Association contact and consult with local communities concerning their willingness to cooperate in the locating of physicians in their areas.
4. That the State Association ask for the privilege of consulting and cooperating with the State Board of Health in the master planning for hospital construction under the Hill-Burton Bill.
5. That the Association give every assistance and impetus to the formation of a state-wide hospital plan with the University Hospital as the parent hospital.
6. That the State Association and the County Societies take a greater interest in understanding and promoting the non-profit insurance plans known as Blue Cross and Blue Shield, would have been sponsored and endorsed by the State Association.
7. That the State Association and the County Societies through every avenue available seek to counsel with governing bodies concerning the proper handling of the indigent.
8. That wherever possible the County Societies work out local plans for handling emergency calls and the demands made upon the physician during other than his normal working hours.
9. That the State Association make an immediate survey and study as to the possibility of any physician now practicing in the State who would be willing to relocate under desirable circumstances.

Your Council knows this is an ambitious program, but by the same token believes that it is fundamental if any attack is to be made on the problem of adequate care for all the people.

If these objects can be fulfilled, medicine will have moved forward in its obligations to the people.

The principle of extension of public health services in the prevention of disease is fundamental, and your Council would charge each individual Delegate with securing the cooperation of his county and district society with giving full cooperation to the State Board of Health, cooperating locally in health programs, clubs, and public and private agencies associated with the health field.

With reference to the third objective, your Council makes the following comment. The establishing of a Health Planning Board has operated successfully on both State and local levels. Certainly if public support is to be on medicine's side in its fight for the principles it believes right, it must not hide these principles. Your Council is so firmly convinced of medicine's position on principles that it believes representatives of business, labor, agriculture, the body politic, and the consuming public should be enlisted in medicine's fight for better health for all the people. Your Council recognizes that the inclusion of some groups named may seem inopportune, but your Council is more convinced that the vast majority of people will do the right thing when the truths are known that it is willing to meet across the table with all segments of our population. Your Council would like to have the approval of this House of Delegates to proceed in this field of social-economic and political planning for better health.

The fourth objective for the establishing of a closer liaison with the allied professions is obvious in its intent. The problems of the allied professions are the same problems as those of the medical profession. Some of the misunderstandings are petty in their foundation and come about through lack of analysis and discussion. Your Council recommends that each County and District Society have at least one meeting each year with the allied professions.

Your Council in concluding its report and recommendations feels that it should request this House of Delegates to take a firm and realistic stand on one phase of medical public relations that has heretofore been handled at the local level. This phase referred to falls in the category of professional relations.

Your Council is fully aware of the studies being made by the sub-committee on Professional Relations to the Public Policy Committee in this field. However, your Council would like to lend its emphasis to this very important problem.

The Council is aware of the widespread criticism of the Medical Profession which has appeared in magazines, newspapers, and editorials. The character of these references, their timing for release, and the comparatively insignificant retractions as compared with the original blast gives one the impression of a planned campaign to discredit American medicine. While there are many variations, two main complaints are most frequently mentioned:

1. Difficulty in obtaining medical services in the home, especially at night.
2. Wide variation in fees charged for what appear to comparable services.

While it is impossible to comprehensively cover these problems briefly, it is the feeling of the Council that the House of Delegates should direct the several county societies to appoint active committees to work out the local situation with respect to these two basic problems.

The Council recommends that a committee of the Oklahoma State Medical Association be named to receive and investigate complaints dealing with alleged overcharges* for professional services, and that the newspapers of the State be requested to give publicity to the functions of this committee.

Your Council recommends that the committee at all times be composed of the five immediate past presidents still living and that the committee consider complaints from three principle viewpoints as follows:

1. The amount of service rendered.
2. The responsibility assumed.
3. The patient's ability to pay.

Your Council now requests the House of Delegates to give its consideration to this report and pledges its individual efforts to accomplish these objectives.

*Amended by the House of Delegates, See P. 16, par. 6.

After the reading of the Council Report, the Speaker stated that the following points required action to be taken by the House: (1) Dues; (2) Budget; (3) Appointment of a special committee to work on the Blue Cross Blue Shield problem; (4) Endorsement of four-point program as outlined; (5) Endorsement of the recommendation that a committee composed of the five past presidents still living investigate complaints by the public against the medical profession.

General discussion ensued concerning the Council Report, with special emphasis on that part of the report concerning the establishment of a State Health Planning Board. It was believed by several that the word,

"State," would be confusing in that this would be an informal body and not an official body. It was suggested that the Board be called the Oklahoma State Medical Association Health Planning Board, for the sake of clearness. It was *moved* by L. H. Ritzhaupt, M.D., Guthrie, that this item of the Council Report be changed to read, "The establishment of an Oklahoma State Medical Association Health Planning Board for the State." The motion was *amended* by C. E. Northcutt, M.D., Ponca City, that the word, "State," be deleted, and the wording only "Health Planning Board." The amendment was accepted by Dr. Ritzhaupt. The motion was *seconded* by E. W. Bollinger, M.D., Henryetta, and *carried*.

The next item for discussion was that concerning the grievance committee. After discussion, it was *moved* by L. H. Ritzhaupt, M.D., Guthrie, that this should read, "The Council further recommends that the words 'alleged overcharges' be stricken and the word 'grievance' be inserted. The motion was *seconded* by P. S. Anderson, M.D., Claremore, and *carried*.

Following the above amendments to the Council Report, it was *moved* by L. C. Kuyrkendall, M.D., McAlester, and *seconded* by J. G. Edwards, M.D., Okmulgee, that the Council Report with the above corrections be accepted. The motion *carried*.

The Speaker then stated that a number of Committee Reports had been published in the *Journal*; therefore, it would not be necessary to read them, and unless there was objection, a motion for acceptance would be in order. It was *moved* by Earl Woodson, M.D., Poteau, and *seconded* by W. A. Howard, M.D., Chelsea, that the Committee Reports be accepted as published. The motion *carried*.

The Speaker of the House then called upon P. P. Nesbitt, M.D., Tulsa, for a report of the Necrology Committee, which is as follows:

"The Committee on Necrology submits the following report to the House of Delegates:

"Since the last Necrology report in May, 1948, The Almighty in his infinite wisdom has called from our midst 33 of our beloved friends and co-workers. While we bow in sorrow to the will of the Omniscience, we are appreciative of these wonderful men —Physicians, scientists, teachers, and friends, and their far-reaching influence which will continue to inspire us to carry on our duties to Humanity.

"THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association, recognize the demise of those former 33 Fellow Members and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association.

| | | |
|-------------------------|---------------|--------------|
| E. J. Boling | Billings | March, 1948 |
| R. P. Dickey | Caddo | March, 1948 |
| William Polk Longmire | Sapulpa | May, 1948 |
| V. C. Tisdal | Clinton | May, 1948 |
| Clarence R. McDonald | Mannford | June, 1948 |
| M. A. Houser | Tulsa | June, 1948 |
| William C. Vernon | Okmulgee | June, 1948 |
| Marion McDowell Webster | Ada | July, 1948 |
| I. L. Cummings | Ada | July, 1948 |
| A. M. Butts | Holdenville | July, 1948 |
| Euel Hathaway | Lawton | July, 1948 |
| W. B. Davis | Stroud | July, 1948 |
| Bernard L. Brantley | Tulsa | August, 1948 |
| Ben Bell | Oklahoma City | Sept., 1948 |

| | | |
|------------------------|-----------------|-------------|
| George R. Osborn | Tulsa | Oct., 1948 |
| Ralph V. Smith | Britton | Nov., 1948 |
| S. C. Davis | Blanchard | Nov., 1948 |
| J. J. Hipes | Coalgate | Nov., 1948 |
| Harris P. Price | Tulsa | Nov., 1948 |
| Frank H. Norwood | Prague | Dec., 1948 |
| Walter Henry Livermore | Chickasha | Dec., 1948 |
| J. L. Derr | Waurika | Dec., 1948 |
| L. T. Lancaster | Cherokee | Dec., 1948 |
| L. C. White | Adair | Dec., 1948 |
| Jonah Nichols | Gulfport, Miss. | Dec., 1948 |
| Thomas Boyd Turner | Stigler | Dec., 1948 |
| Benjamin Davis | Cushing | Jan., 1949 |
| M. M. Turlington | Seminole | Jan., 1949 |
| M. W. Weir | Oklahoma City | Feb., 1949 |
| S. M. Parks | Bartlesville | Feb., 1949 |
| E. P. Allen | Oklahoma City | March, 1949 |
| Frank M. Boadway | Ardmore | April, 1949 |
| G. H. Stagner | Edmond | April, 1949 |

Respectfully submitted,
P. P. Nesbitt, M.D., Tulsa

George H. Neimann, M.D., Ponca City

The Speaker announced that the following reports had not been published in the *Journal* and would now be called for to be read at the meeting:

Industrial and Traumatic Surgery — J. S. Chalmers, M.D., Sand Springs, Chairman. No report.

Insurance Committee — John McDonald, M.D., Tulsa, Chairman. No report.

Maternity and Infancy Committee — E. N. Smith, M.D., Oklahoma City, Chairman. No report.

Rural Health Committee — Ned Burleson, M.D., Prague. No report.

Allied Professions Committee — R. Q. Goodwin, M.D., Oklahoma City. No report.

Study and Control of Cancer Committee — Joseph W. Kelso, M.D., Oklahoma City. No report.

Advisory Committee to Woman's Auxiliary — V. K. Allen, M.D., Tulsa, Chairman. No report.

Study and Control of Infectious Diseases — Marvin D. Henley, M.D., Tulsa, Chairman. No report.

Onis G. Hazel, M.D., Chairman of the Committee on Conservation of Health, submitted a provisional report concerning public health statistics for 1948 and requested that the report be published and did not request acceptance.

The speaker of the House of Delegates then stated that the Public Policy and Publicity Committee would present a special report in two parts; Part I dealing with Legislative matters would be presented by McLain Rogers, M.D., Clinton, and Part II concerning the educational campaign against compulsory health insurance by John F. Burton, M.D., Oklahoma City. Dr. Rogers gave the following report:

REPORT OF THE PUBLIC POLICY COMMITTEE

Part I—Legislation

The progress of the State Legislative Program of the Association in the present session has been gratifying.

The State Board of Medical Examiners, in line with its constant efforts to improve the legislation under which it operates requested approval of the Public Policy Committee for four bills providing:

1. Authority for the Board to require one year's internship in an approved hospital as a prerequisite to the issuance of medical licenses.

2. Authority for the Basic Science Board to issue certificates in the Basic Sciences to those physicians

who were in practice prior to the passage of the Basic Science Law in 1937 but who can present evidence of having satisfactorily passed the subjects required in the Basic Science Examination at the time of medical licensure.

3. Authority for the Board of Medical Examiners to revoke the licenses of physicians who may be declared insane by the courts of the state.*

4. The power of injunction to the Board of Medical Examiners for enforcement of the Medical Practice Act.

All of these bills which were approved by the Public Policy Committee and subsequently by the Council have progressed most satisfactorily, with the exception of Number 4, and it is anticipated that the first three will

*Amended by the House of Delegates, See P. 21. receive final approval in the state Senate within a very short time.

In addition to support of the above measures the Public Policy Committee was active in support of the appropriations measures for the University of Oklahoma Medical School and the State Health Department. In that connection it should be noted that the appropriation for the Medical School was sufficient to provide additional buildings and equipment which are necessary for increasing the enrollment in the school, a goal which has constantly been before the Association.

The Committee cooperated very closely in every way with the management of the Blue Cross and Blue Shield plans and as a result, passage was secured of enabling legislation allowing Blue Cross and Blue Shield to continue community enrollments and provide additional benefits to their members.

The Committee has also been active in support of the following bills:

Providing for liens in favor of hospitals and doctors of medicine in personal injury cases in which the patient is asserting claim for damages against third persons.

Providing for a system of licensing institutions requiring the use of animals for experimental purposes and making such animals available from the public pounds.

Substituting a system of Medical Examiners for the present unsatisfactory system which provides that the justices of the peace of the State shall serve as coroners.

Authorizing the State Board of Medical Examiners to issue licenses at reduced fees to doctors of medicine serving residencies in approved hospitals in the State of Oklahoma.

The protection of the profession and of the health and welfare of the public has also required the Committee to exert its efforts in the consideration of the following legislation:

A bill authorizing the licensing of pharmacists on the basis of practical experience which was killed in Committee through the joint efforts of your committee and representatives of the State Pharmaceutical Association.

A bill repealing the Price Advertising Act of 1947 also killed in Committee.

A bill requiring employers to provide employees with copies of the reports on physical examinations required as a condition to employment or continued employment, which it now appears, will die on the calendar of the state Senate. In any case amendments will be presented which will serve to eliminate the features of this Bill which would lay the profession open to countless malpractice and other damage suits.

A bill amending the Workmen's Compensation Act to allow the injured employee to select his physician without regard to the interests of the employer or insurance carrier who is required by law to provide medical care and treatment for the injured employee. This bill, believed by many to be an effort on the part of the labor organizations to control the Workmen's Compensation practice, will, it appears, die in the House Labor Relations Committee.

Your Committee recommends as a future state legislative program:

1. The continued endorsement of any reasonable legislation aimed at increasing the facilities of the University of Oklahoma Medical School and hospitals and consequently increasing the potential enrollment in the Medical School.

2. Continued support of the program of the State Health Department and legislation necessary for operation and financing of that program.

3. Further attempts toward providing the State Board of Medical Examiners with the power of injunction for the purposes of enforcing the provisions of the Medical Practice Act.

4. Continued vigilance to prevent enactment of legislation aimed at legalization of cults and quackery.

5. Continued cooperation with the State Bar Association, State Peace Officers in efforts to secure enactment of the Medical Examiners Bill.

While your Committee has naturally not been as close to the national scene of action, it is on this front that happenings of intense interest to every member are taking place almost daily.

Since Part II of this report covers fully the activities of your Committee which have been aimed at protecting the best interests of the people, on a national level, Federal legislation and its status is all that will be considered here.

Most important of the bills to provide for National Compulsory Health Insurance is Senate Bill 1679 introduced April 25 and in reality only a bigger and more dangerous version of its forerunners, the Wagner, Murray, Dingell Bills. The same bill was introduced in the House as H.R. 4312 and H.R. 4313.

Senate Bill 1679 has been referred to the hard-to-handle Committee on Labor and Public Welfare and the House versions to the Committee on Interstate and Foreign Commerce on which it is fortunate that Oklahoma has a member, George Howard Wilson of the Eighth District, who was committed against such legislation during his campaign. It is the belief of your Committee that this is the bill behind which the administration will marshal its strength and on which the profession can expect the real battle.

Senate 1581 and Senate 1456, the latter the much publicized Lister-Hill Bill, both attempt to solve the nation's health problem by Federal legislation consisting of grants-in-aid to the states and governmental sponsorship of the voluntary prepayment plan.

As of this date, neither the A.M.A. nor your Committee has endorsed these bills.

H.R. 782 which would constitute the Federal Security Agency as a Department of Welfare, with cabinet status, has been vigorously opposed by your Committee in favor of a Department of Health with a Doctor of Medicine as its head.

In view of the ever-changing scene in regard to national legislation it is impossible for your Committee to determine what action will be necessary on its part from time to time in efforts to prevent the socialization of the practice of medicine in the United States. Since

hearings are scheduled to begin on Compulsory Health Insurance legislation at a very early date, it is entirely possible that your Committee will find it necessary to contact the members of the Committees holding hearings on these bills and perhaps for some member of this Association to appear before those committees for the presentation of evidence.

The very fact that Oklahoma is represented on one of these committees makes it even more likely that demands for information will be made upon this Association. It is, therefore, the desire of the Committee that every County Society and every individual member hold themselves in readiness to offer every possible assistance to the Committee and the Officers of your Association whenever the time for action may arise.

The Committee requests your indulgence for the incomplete nature of this report, since, as all of you know, the Legislature and the Congress are still in session and further action in regard to some of the bills reported is entirely possible.

Following Dr. Roger's report, that part of the report concerning the authority of the Board of Medical Examiners to revoke the license of physicians declared insane went to the floor for discussion. After general discussion regarding this portion of the report, it was *moved* by Ned Burleson, M.D., of Pragne, *seconded* by S. A. Lang, M.D., Nowata, that the portion of the report dealing with the revoking of licenses of insane physicians be disapproved. The motion *carried*. It was then *moved* by Clinton Gallaher, M.D., Shawnee, *seconded* by John Burton, M.D., Oklahoma City, that Part I of the Public Policy Report be accepted. The motion *carried*.

The Speaker then called upon Dr. John Burton of Oklahoma City for the reading of the second part of the Public Policy Report. Dr. Burton read the following report:

Part II—State Educational Program

Your Committee desires to point out that the creation of national leadership by the A.M.A. in its national Education Program, the work of your State committee and the Executive Office has multiplied and mounted to a place where your committee is viewing with some alarm its work in the year to come. Your Committee frankly has heard statements that with the advent of the A.M.A. into the field of public relations that there might possibly be reason to assume that work on the state and county level will be lessened. As previously intimated, the direct opposite has been true. For the information of the House of Delegates and to account for its stewardship, your Committee would point out that the unexpected return of the Democratic party to a place of leadership in Washington definitely changed the trend of thinking necessary by the Committee. This was in November. Following closely on the heels of this situation, the A.M.A. announced its public relations program, and your Committee did not feel that it should embark upon a state educational program until such time as the program of the A.M.A. was known. This was not definitely announced until February 12 of this year, and since that time your Committee has redoubled, tripled, and quadrupled its work.

Since January 1, 1949, over 15,000 pieces of material have been mailed from the Executive Office to both members of the Association, the Auxiliary and lay persons. Included in the mailing to lay persons were 3,000 copies of *Uncle Sam, M.D.*, *American Medicine and Political Scene*, by Marjorie Shearon, reprints of *Insurance Economics Survey*, and packets of detailed material to many who wrote in for such to be used in

making speeches on the subject of Compulsory Health Insurance. In addition, this material was used in debate classes and by students writing papers on the subject.

Beginning on April 1 the *News Letter* was re-instituted and three mailings have been made to the profession since that time, the number of mailings depending on the breaks in the news, but with one issue to be put out at least monthly. News releases have been sent to the 304 newspapers in the State, and will be continued.

Public Policy Committees have been appointed in 36 of the 54 county and district societies and two councilor District meetings to implement the County Public Policy Committee's work have been held; one in Shawnee, the other in Okmulgee.

Resolutions and letters to the Congressional representatives in Washington opposing Compulsory Health Insurance, which is an important part of the National Education Campaign, show on the first tabulation by the A.M.A. that Oklahoma leads all other states in the number of resolutions secured. To date, 28 county medical societies and 25 auxiliaries, in addition to 17 outside organizations, including the Federated Women's Clubs, have adopted such resolutions and there is no factual way of measuring the total number of letters and telegrams that have been reported.

In the field of public speaking, your Committee estimates that it has provided either through personnel of the Association or by assisting lay persons to present the facts concerning Compulsory Health Insurance, to over 400 audiences.

Plans have been made and tentative exhibit space has been secured for the showing of exhibits at the state fairs in Tulsa, Oklahoma City, and Muskogee, and with any and all additional county fairs to be utilized where there is no conflict in date.

Your Committee's radio program, "Tell Me, Doctor," is now on nine radio stations as follows: KGLC, Miami; KTUL, Tulsa; KOCY, Oklahoma City; KSWO, Lawton; KRHD, Duncan; KSEO, Durant; KWON, Bartlesville; KCRC, Enid; and KADA, Ada, and is available to all other stations without charge. Here again is another public service to the people which is attempting to build good will for the profession.

The Public Policy Committee would like to advise the House of Delegates that the Association's expenditures in the public relations field is not solely a problem singular to Oklahoma. Your attention is directed to a survey of state medical associations' programs and budgets taken by the New Jersey Medical Association. This survey showed a top state budget of \$210,000 for the State of Michigan, with Oklahoma's budget being about average. This was reported to all O.S.M.A. members in the Committee's *News Letter* of April 22.

Your Committee, in advancing the work of its six sub-committees — Newspaper, Publicity, Radio, Visual Education, Professional Relations, Awards, Contests, and Literature, Public Speaking, and the Auxiliary, has been unable to do justice to all sub-committees for the very truthful reason that there is insufficient personnel available in the office of the Oklahoma State Medical Association, although the Committee employed a secretary to work full time.

Your Committee fully realizes that the public press has stated that no legislation bringing about compulsory health insurance will be enacted in this session of Congress. Your Committee concurs in this observation; however, your Committee would point out to each member that hearings on these bills will be started in Washington on May 16, and it is your Committee's

further opinion that the record will be written at that time for early consideration in the session of Congress beginning in 1950. There can be no let-up in this all-out fight. Should the proponents of this bill fail to have it passed in either this Congress or the one to assemble in 1950, there is little doubt that it will be a campaign issue in the elections of 1950.

Your Committee cannot estimate, at this time, what it will have to promote in the way of a program for the year to come. Representative George Howard Wilson of Enid is a member of the House Committee that will hear the Compulsory Health Insurance measures, and your Committee will give him every aid and assistance.

Your Committee has been privileged to see the recommendations made by the Council in its report to this body concerning the support of the A.M.A.'s national education program and the creation of a special committee to consider the public's criticism of the profession and wholeheartedly concurs in these recommendations. Your Committee likewise has consulted with the Council concerning the manner in which the funds of the Committee shall be handled and makes the following recommendations which have been concurred in by the Council:

1. That the funds now allocated to the Public Policy Committee be placed in the general funds of the Association, beginning January 1, 1950.
2. That the Committee reimburse the general funds of the Association for past expenditures for the Committee.
3. That the Committee prepare and submit to the Council at six months' intervals its anticipated expenditure needs.

Your Committee has full faith in the Council and House of Delegates to meet any and all demands for an all-out fight against Compulsory Health Insurance. Your Committee also refuses to believe that the individual members of the profession will not be willing to finance such a program.

Your Committee would specifically call to your attention the splendid work done by the Auxiliary. Not enough can be said for the fine work being done. While your Committee knows that the success of the Auxiliary is due to the efforts of all its members, your Committee would, nevertheless, like to give particular commendation to its President, Mrs. Neil Woodward of Oklahoma City, and the Chairman of its Public Policy Committee, Mrs. W. R. Cheatwood of Duncan.

Your Committee urges and requests each individual member of the Association to give any and all constructive criticisms. It is fully aware of the need for assistance from everyone.

Your Committee asks the House of Delegates to give its full support to the all-out effort to protect the people from the threat of compulsory health insurance.

Following the reading of this report, it was *moved* by P. S. Anderson, M.D., Claremore, *seconded* by S. A. Lang, Nowata, that the report be accepted as read. The motion *carried*.

The Speaker stated that, although a report of the Post Graduate Committee had been published, Gregory Stanbro, M.D., of Oklahoma City, Chairman, had asked for time to give a supplemental report. The Speaker then called upon Dr. Stanbro.

Dr. Stanbro stated that the Committee, after contacting over 100 medical institutions, has obtained Robert N. Becker, M.D., of Boston, Massachusetts, who will be the instructor in internal medicine for the coming two years. Dr. Stanbro further stated that in addition to the usual ten lectures, Dr. Becker had inti-

mated his desire to give additional post graduate work to those physicians who desired same.

Dr. Stanbro pointed out the essential need in each county for a chairman to conduct the post graduate work and to assist in securing enrollments and attendance at the lectures. He pointed out that the courses needed to be synchronized so that the lecturer would not find it necessary to repeat. Dr. Stanbro observed that in his opinion, one of the best means to counteract socialized medicine is to demonstrate to the public that physicians at all times study and take an active part in preparing themselves to give the best in scientific medicine. Dr. Stanbro paid particular commendation to the members of his committee who have worked so faithfully during past courses and gave particular appreciation to the capabilities, efficiency, and initiative of Mrs. Orene Ramsey, who acts as the Secretary of the Committee.

The next order of business was the presentation of the amendments to the Constitution and By-Laws. According to Chapter XIII of the By-Laws, it is mandatory that these be presented at the afternoon session and be passed upon at the evening session. W. J. Sayles, M.D., Miami, Chairman, was called upon and read the following:

AMENDMENTS TO BY-LAWS

Chapter I—Membership

Section 3. Classification.

(c) Life Members

To be amended to read as follows: Line 19, following the word "Association" add the following sentence:

"Life Members shall be considered the same as fully-paid members in computing the membership of the County Society for the purpose of determining the number of delegates that the County Societies shall be entitled to send to the House of Delegates as provided in these By-Laws."

Chapter III—House of Delegates

Section 1. Representation.

To be amended to read as follows: Line 4, following the words "fully-paid," and before the word "members," on Line 5, insert "Honorary and Life".

Chapter IV—Councilor Districts and Councilors

Section 2. Terms of Councilors.

The body of sub-section (b) of Section 2 to be deleted and amended to read as follows:

"(b) The terms of office of all Councilors elected after the 1949 Annual Session shall be three (3) years and until their successors are elected and qualified. No Councilor elected after the 1949 Annual Session shall be eligible to serve continuously for more than two (2) elective terms. Provided, however; (1) The one and two-year elective terms provided for in (a) of this section shall not be considered in the application of this limitation; (2) Service as Councilor by appointment for completion of an unexpired term shall not be considered in the application of this limitation; (3) This limitation shall apply only to continuous service; (4) Service as Vice-Councilor shall not be included in the computation of service as Councilor under this limitation."

Chapter III—House of Delegates

Section 1. Representation.

To be amended to read as follows: Line 13, following the word "that," strike the remaining words of the Section, and insert in lieu thereof the following:

"the representation of district societies comprising more than one county in the House of Delegates shall be apportioned on the basis of the individual counties comprising such amalgamated society, with each county in which more than five (5) members reside being

entitled to at least one delegate. In case of counties having less than five members, their members shall be included in the total membership of the district society, and if the total membership is sufficient to entitle the district society to an additional delegate such additional delegate shall be elected by the district society at large."

Chapter I—Membership

Section 3. Classification.

(b) Honorary members

To be amended to read as follows: Line 11, after the word "session" and before the words "The approval" on line 12, insert the following:

"provided, however, that any former member of the Association who, at the time his membership lapsed, had been an active member of the Association for five (5) years and who possesses the other qualifications for Honorary Membership, shall be eligible for election to Honorary Membership on presentation of his petition by the component society of the county in which he resides, if the petition for such physician is presented to the Executive Secretary before January 1, 1950. After the 1950 Annual Session, Honorary Membership shall not be available under the terms of this proviso."

(c) Life Members

To be amended to read as follows: Line 14, after the word "session," and before the words "The approval" on Line 15, insert the following:

"provided, however, that any former member of the Association, who at the time his membership lapsed, had been an active member of the Association for five (5) years, and who possesses the other qualifications for Life Membership, shall be eligible for election to Life Membership on presentation of his petition by the component society of the county in which he resides, if the petition for such physician is presented to the Executive Secretary before January 1, 1950. After the 1950 Annual session, Life Membership shall not be available under the terms of this proviso."

Chapter III—House of Delegates

Section 4. Reference Committees.

(b) to be amended to read as follows: Line 11, after the word "begin," and before the word "following" on Line 12, strike the word "immediately" and insert in lieu thereof, the words and figures, "January 1".

Chapter V—Election of Officers

Section 4. Installation.

The body of the section is to be deleted and amended to read as follows:

"The President-Elect shall assume the duties of President at the close of the next annual session after his election. The delegates to the American Medical Association shall assume office on January 1 following their election. All other officers shall assume office at the close of the Annual session at which they are elected. The terms of office of all officers shall be as herein provided, or until their successors have been elected and qualified.

"All retiring officers of this Association shall promptly turn over to their successors all papers, records, books, and equipment of their office immediately upon being succeeded."

Upon the reading of the Amendments to the By-Laws, the Speaker again pointed out that it would be impossible to act upon these amendments until the evening session.

Following the reading of the Amendments to the By-Laws, the Speaker stated that the next item on the agenda would be the determination of a place for the next Annual Meeting of the Association. He called for invitations. The following letter of invitation was read by Onis G. Hazel, M.D., Oklahoma City, President of the Oklahoma County Medical Society:

May 15, 1949

"Clarence E. Northcutt, President., etc.

Dear Doctor Northcutt:

On behalf of the members of the Oklahoma County Medical Society, I wish to extend a most cordial invitation to the Oklahoma State Medical Association to hold its Fifty-Seventh Annual Session in Oklahoma City next year.

Cordially,

/s/

Onis G. Hazel, M.D., President
Oklahoma County Medical Society"

It was moved by J. G. Edwards, M.D., of Okmulgee, and seconded by H. A. Higgins, M.D., of Ardmore, that the invitation be accepted. The motion carried.

The Speaker then read the Amendments to the Constitution which had been presented at the 1948 session of the House of Delegates and which could not be acted upon until one year had elapsed. The amendments are as follows:

PROPOSED AMENDMENTS TO THE CONSTITUTION

The amendments to the Constitution of the Oklahoma State Medical Association to be considered at the 1949 Annual Meeting submitted by the committee to revise the Constitution and By-Laws at the 1948 Annual Meeting.

(The placement of these amendments are predicated on publication in 1947-48 Directory) Constitution

Article I: Add at the end of the sentence the word "Incorporated."

Article II: Purpose of the Association. "This Association is formed to promote the science and art of medicine," and striking the present section.

Article VIII — Section 1: Line 5, after the word "Councilors" and before the word "as" insert the words "and Vice Councilors."

Article VIII — Section 2: Insert at the end of the section, "The President-Elect shall become President for a term of one year upon the expiration of his term as President-Elect."

Article VIII — Section 2: Line 5, between the words "Councilors" and "for" insert the words: "and Vice-Councilors."

Article VIII — Section 4: Line 3, add, between the words "appointment" and "being" the following words: "by the President," and to add at the end of the last sentence "and Councilors, whose terms shall be completed by their respective Vice-Councilors."

S. A. Lang, M.D., Nowata, was accorded the floor and said: "I make a motion that we approve these amendments as printed in the *Journal*." The motion was seconded by H. A. Higgins, M.D., Ardmore, and carried.

The Speaker then called upon C. E. Northcutt, M.D., Ponca City, to read the Requests for Amalgamation of County Medical Societies. Dr. Northcutt said: "The following requests for amalgamation of County Medical Societies into District Medical Societies have been received in the Executive Office of the Association, and inasmuch as these requests meet the requirements of the Constitution and By-Laws, the Council recommends their approval by the House of Delegates:

LeFlore-Haskell County Medical Societies
Garfield-Kingfisher County Medical Societies
Rogers-Mayes County Medical Societies
Craig-Ottawa County Medical Societies (held over from 1948 as the application was submitted too late to meet the requirements as specified in the Constitution of the Oklahoma State Medical Association.)

Dr. Northcutt then moved that these counties be amalgamated. The motion was seconded by L. C. Kuyrkendall, M.D., McAlester, and carried.

The Speaker then called for nominations for Honorary and Life members. C. E. Northcutt, M.D., Ponca City, was recognized and said:

"The Executive Office has received the following requests for Honorary, Life and Associate Memberships in the Association:

LIFE MEMBERS

O. S. Somerville, M.D., Bartlesville
S. P. Roberts, M.D., Bartlesville
I. V. Hardy, M.D., Medford
O. W. Rice, M.D., McAlester
A. L. Dougan, M.D., Carmen
R. B. Hayes, M.D., Guymon
Jesse L. Blakemore, M.D., Muskogee
W. R. Joblin, M.D., Porter
W. D. Baird, M.D., Oklahoma City
J. T. Martin, M.D., Oklahoma City
J. E. Harbison, M.D., Oklahoma City
W. W. Rucks, Sr., M.D., Oklahoma City
F. M. Sanger, M.D., Oklahoma City
R. M. Howard, M.D., Oklahoma City
R. A. Brown, M.D., Prague
Raymond W. Stoner, M.D., Checotah
Dan Gray, M.D., Guthrie
H. A. Higgins, M.D., Ardmore
Walter Hardy, M.D., Ardmore

HONORARY MEMBERS

Joseph G. Breco, M.D., Ada
Sam A. McKeel, M.D., Ada
H. E. Huston, M.D., Cherokee
Thomas J. Lynch, M.D., Tulsa
W. Albert Cook, M.D., Tulsa
Sidney C. Venable, M.D., Tulsa
O. E. Templin, M.D., Alva
R. C. McCreery, M.D., Erick
D. B. Collins, M.D., Lawton
William A. Tolleson, M.D., Eufaula

ASSOCIATE MEMBERS

E. Harold Hinman, M.D., Norman

"Your Council has considered these requests and desires to make a recommendation to the House of Delegates.

"Three years ago the classification of Life Member was created by the House of Delegates in recognition of certain members of the profession who had served long and useful lives in the practice of medicine and who for one reason or another in the judgment of the County Society should be removed from the dues-paying rolls. One of the main reasons for the classification was in order that the classification of Honorary Membership might become more exclusive and be granted to only a few physicians whose place in medicine and in the lives of mankind might be exceptionally meritorious.

"Without criticism being directed toward anyone, your Council is of the opinion that many County Medical Societies have not fully understood the difference in these classifications and the reasons for their creation.

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Your Council at its meeting in Oklahoma City May 1, 1949 felt that it was its obligation to call to the attention of the House of Delegates that in its considered opinion the requests that are herewith presented do not correctly reflect the proper classifications for all of these physicians.

"Believing that the House of Delegates would concur in this thinking of the Council, your Council considered each physician name by name and makes the following recommendations:

1. That all physicians whose names have been submitted for Life Membership be so elected.
2. That all physicians whose names have been submitted for Honorary Membership be elected to Life Membership, except the following, who, it is recommended, should be elected to Honorary Membership:
 W. Albert Cook, M.D., Tulsa — Past President of O.S.M.A., Delegate to A.M.A. 26 years, President of his County Medical Society, 50 years in practice.
 Sam A. McKeel, M.D., Ada — Past President of O.S.M.A., member of State Board of Medical Examiners, President of his County Medical Society, 50 years in practice.
 William A. Tolleson, M.D., Eufaula — Past Vice-President of O.S.M.A., 25 years Secretary of his County Medical Society, 50 years in practice, member of O.S.M.A. since Indian Territory days.

"The Council would also suggest to the Committee on Constitution and By-Laws that consideration be given to amending the By-Laws with reference to Honorary Membership and that a secret committee be appointed each year by the President to consider and investigate requests for Honorary Membership and that the approval of this committee must be received before a member's name may be considered for this type classification."

After considerable discussion, it was *moved* by W. T. Gill, M.D., Ada, *seconded* by E. D. Padberg, M.D., Ada, that the name of Joseph G. Breco, M.D., be placed on the list for election to honorary membership in the State Medical Association. This motion *did not carry*. A *motion* was then made by C. E. Northcutt, M.D., Ponca City, that the House of Delegates elect the three members submitted to honorary membership, the one member to associate membership, and the balance to life membership, and that a committee be appointed by the President of the Association to consider and investigate such recommendations in the future. This motion was *seconded* by Finis W. Ewing, M.D., Muskogee, and *carried*.

Following the election of life, honorary, and associate members, the Speaker of the House advised the delegates present that the time had come in the session under the special order of business previously adopted by the House for the delegates from the respective newly-created councilor districts to caucus for the purpose of determining their nominees for councilors and vice-councilors. In order to facilitate the caucusing of the delegates, specific meeting rooms were assigned to each of the newly-created districts. Following the assigning of the caucus rooms, the speaker declared the first session closed, and announced that the second session would convene at 7:00 P.M.

(To be continued in September issue.)

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MEDICAL ABSTRACT

SURGERY GYNECOLOGY AND OBSTETRICS; James Barrett Brown, M.D., F.A.C.S., Frank McDowell, M.D., F.A.C.S., and Minot P. Fryer, M.D., St. Louis, Missouri. 88:5:609-622 (May) 1949.

SURGICAL TREATMENT OF RADIATION BURNS

This article is very timely and appropriate, since it discusses a problem that is seen by all types of practitioners and in all localities. The authors, who are recognized national authorities in their field, present the problem in a very fair scientific manner.

"Excessive exposure to x-rays produces changes in the skin and other tissues that sometimes require excision and repair. Radium and other radioactive substances also may cause severe changes; atomic warfare may produce lesions similar to those seen in local areas at present. The skins of some individuals may be unusually sensitive to the x-ray and exposure may produce acute episodes that may clear up in time. Permanent chronic changes, however, develop in practically all skins which have been exposed to heavy or repeated excessive or incorrect dosages of x-rays.

These comments have no relation to the usefulness of, or indications for, x-ray therapy, nor are they meant to suggest any directional approach to the problems in the use of radiation therapy.

SOURCES

"Burned hands of physicians are the most frequently seen at the present time (fig. 2). Many of these burns occur while difficult fractures are being reduced under the fluoroscope; the physician's anxiety for the welfare of his patient may have dulled his regard for his own personal safety. Nevertheless, such burns are preventable and every physician using an x-ray machine should be aware of the effects of a single large dose and of the irreversible, cumulative effect of repeated small doses over many years.

"Dentists fingers are sometimes burned, especially if they hold films in the mouths of patients during exposure.

"Prolonged fluoroscopic examinations have produced some most unfortunate burns as a result of miscalculations in distance, time or filters (Figs. 1, 15, 16, 20, 21). Examinations of mepyme fluid levels, fractured metatarsals, and fractured vertebræ have produced especially bad burns. As these burns are of such great trouble both to the patient and to the one responsible for them, it seems advisable to give warning of this source."

"Aene, exzema, port-wine stains, plantar warts, epidermophytosis, and pruritus ani are all troublesome diseases, but are as nothing compared to the possible effects of excessive radiation therapy.

"'Sailor's skin,' or 'farmer's skin,' — the dry, atrophic, telangiectatic skin resulting from decades of heavy exposure to sunlight — is especially intolerant of x-radiation. The pathological changes in this type of skin are similar to those in a mild x-ray burn, and it is probably advisable to treat by other means keratosis, skin cancers, and even lip cancers in such patients.

"Commercial epilation of superfluous hair by x-ray has caused some of the most dramatic, extensive, and useless burns; patients have been seen with burns of the entire lower legs, the outside of the thighs, the axillæ, outside of upper arms, entire forearms, hands, back of neck, entire front of neck. The prolonged morbidity, suffering, and loss of economic and social status endured by these patients cannot be condoned in the

face of the slightness of their original complaint of superfluous hair. This commercial procedure cannot be too severely condemned.

"Hemangioma and plantar warts. As more time elapses the distant effects of radiation treatment will become more apparent, and perhaps in some instances, changes in therapy or dosage will be instituted. Typical lesions that are treated early and in which later dermatitis and chronic atrophy may result are hemangiomas, especially about the face, and plantar warts. Radiation lesions of the sole of the foot are especially difficult to treat; even cross-leg flaps may be necessary for repair.

"It is hoped that none of these statements will be interpreted as under estimating the very great value of radiation therapy and x-ray examination for many conditions; the x-ray is invaluable and indispensable. Recognition and elimination of the unfortunate ultimate results here discussed may lead to eventual wider usefulness of the various radiation procedures.

TREATMENT OF CHRONIC BURNS

"The triad of atrophy, telangiectasis, and keratosis of the skin should lead to the diagnosis. About the only condition that is to be differentiated is 'sailor's' or 'farmer's skin,' which is similar, but is caused by the cumulative effect of decades of overexposure to sunlight in persons who do not form sufficient melanin to protect themselves (in other words, they do not 'tan'). Differentiation can be made by the history and by the fact that 'sailor's skin' symmetrically affects both forearms, both hands, and the entire face and neck in most patients. Telangiectasis is often predominant in x-ray burns, whereas atrophy and keratosis predominate in 'sailor's skin.' 'Coal spots' rarely occur except in association with x-ray burns. Carcinoma may develop in either.

"The progress of severe chronic x-ray burn through the stages of atrophy, telangiectasis, 'coal spots,' keratosis, and carcinoma is irreversible and inevitable if the patient lives long enough. This course is not affected by the use of any drugs or other means of treatment known at present except the surgical excision and repair of the area. The stages may overlap and the speed of the progress varies greatly so that it is often a major problem to decide when and if to undertake excision. Fast progress in any patient and even slow progress in a young individual are indications for treatment. A paradox of treatment is that the excision and repair should be done when the area is in relatively good condition — not waiting until ulceration, pain, and malignant change have occurred. However, many patients wait for repair until these stages have occurred so that the greatest surgical problem lies within this group.

"Faint telangiectasis and atrophy may not require treatment if it is very slowly progressive, but even in this group excision and repair are sometimes indicated for cosmetic improvement.

"Bland ointments may soften 'coal spots' and keratosis and seem to stop them for a time, but the underlying pathological changes are progressive and later become manifest. On hands, keratosis develop with the 'coal spot' stage and these may rapidly become malignant. These spots can best be removed in mass and the areas skin-grafted. It is less desirable, but feasible in some patients, to do cautery excisions of the individual keratosis as they occur and let the areas heal by secondary intention. These are the un-

usual lesions for which more radiation is sometimes recommended, but it should not be used as it is apt to accelerate the progress of the pathological changes. For the same reasons, carcinomas in x-ray burns should not be treated with more radiation.

"There are two essentials: (1) to get rid of the lesion, and (2) to repair the area for useful function and appearance.

"The persistence of function of skin grafts will be satisfactory if the involved tissue has been excised widely and deeply enough. Edges should be watched and if deep trouble develops, wider and deeper removal and repair may be necessary.

"The preparation of wounds for operation consists of local cleansing, the use of mild local antiseptics (such as 1:5,000 aqueous zephiran) and on feet, non-wettable agents (such as some of the silicate-gel preparations) may be used to prevent maceration of the surrounding skin under the wet dressings.

"These basic steps for repair are used throughout the body, but some local areas may be considered separately.

"Hands. Chronic x-ray burns of the hands occur most often in physicians and dentists and respond well to wide removal of skin and repair with thick split grafts. The heaviest burn may be either on the dorsal or palmar surface, but the opposite surface is nearly always involved to some extent. Excessive pain may occur and require heavy sedation. In lesions of very long duration, the individual blood supply to the fingers may be of such low quality that care has to be exercised in maintaining what there is available — in not doing too radical operations — not sacrificing both arteries of a finger at one time — not getting bandages too tight. When definite carcinoma has developed, very wide deep incision is necessary, but since excision cannot be very deep without sacrificing function, amputation must always be considered as possibly the best and safest procedure in some patients. These lesions do not always remain local; they should be examined and watched periodically for possible regional lymph node involvement. One of the main difficulties, of course, is to get the physician to submit to an adequate operation.

"Face. Radiation burns of the face carry the added responsibility of securing not only good repair but a good cosmetic result. The paradox here is that radical operation should be done early, before the features have been treated for acne or eczema, it is necessary to excise and replace the skin of the entire face — nose, cheeks, lids, forehead, eyebrows, and chin. If excision can be done early enough so that free skin grafts can be used, the functional and cosmetic results are far better.

"It has been noticed that the little difference in closeness of the tip of the nose to the x-ray machine usually produces enough more radiation as to cause greater damage here and in addition a resulting chronic mucositis of the nose if not a burn, must be treated.

"Feet. Radiation lesions of the sole of the foot form a story of their own; there are frequent histories of years of debility and great difficulty of repair. Prophylaxis is as important here as in any region, for the disability may be extreme and prolonged.

"The rules of treatment are the same — excision and repair. Free split skin grafts can be used even for wide areas, if operation is undertaken before ulceration has occurred. Small ulcerations, if not too deep, can often be repaired by local flaps or free grafts, but crossleg flaps are almost always needed for repair of extensively ulcerated lesions. The idea of cutting into the sole of the opposite foot to secure a graft for the repair of a damaged one is mentioned only because it has been advocated and to suggest that it should never be done.

"Fluoroscopic burns of the foot may cause some of the most distressing deep involvements encountered. Where the plantar fascia is involved shreds may be extruded at intervals for months with total disability and considerable joint structures as well as the opposite surface of the foot are especially apt to suffer in these foot lesions. The chronicity of the process far outweighs any value of the fluoroscopic examination.

"Rectogenital area. Perianal and perivulvar burns (usually from treatment of pruritus) offer their special problems in repairing such contaminated areas and dressing such a difficult field. Excision and immediate or delayed free grafting, or the immediate shifting of local flaps inward and the grafting of their sites is usually carried out. Possible troubles from a circular scar near the pectinate line should be considered and avoided if at all possible.

"Preoperative preparation may include enemas and laxatives to empty the bowel and oral streptomycin or sulfasuxidine to reduce the bacterial flora. Frequent sitz baths may help in preparing the local skin.

"At operation, the 'stint' type of fixation may be used on grafts, long edge sutures are tied over a pad of gauze to immobilize the graft and dressing and the edges are surrounded with zinc oxide or some other impervious ointment. The use of a retention catheter and low residue diet for seven to 10 days may help greatly in the prevention of soiling. After that period, cleansing of the grafted area, after each soiling, is carried out with the grafts usually becoming quite stable and requiring little further care after a period of two or three weeks.

"Relief of pain by operation. Pain in these burns may be so severe and so refractory to sedation as to require immediate wide, deep excision of the lesion, with or without primary repair. When pain is so outstanding, very dramatic relief is usually obtained by excision. The patient, upon awakening from the anesthetic, and in spite of the discomforts of the operation will volunteer the information that his pain is gone.

FINAL REMARKS

"These lesions are unhappy ones from every possible aspect, and they are more common than is generally believed. Their prevention should be paramount in all instances of exposure. Their occurrence should be recognized early, and complete excision and repair should be done before malignant changes occur. Such a regimen will greatly reduce the total amount of disability and suffering in these patients.

"It may be repeated that severe lesions are progressive and that surgical treatment should be undertaken before serious ulceration occurs and carcinoma develops."—John F. Burton, M.D.

BOOK REVIEW

GERIATRIC MEDICINE. Edited by Edward J. Steglitz, M.D., F.A.C.P., New, Second edition. 773 pages, with 180 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$12.00.

Senescence is the process of gracefully growing old. Senility is the pathological aspect of, and more visible evidence of aging. Senescence arbitrarily begins at birth, but senility in our complex mechanisms of physiology, may become pathologic at any time in any one or more organs. Hence "geriatrics," the study of old age and its disease, has a varying sliding scale of age delineation. "It is for science not only to add years to life, but life to years. Old age plays a contributing role, modifying, delaying or accelerating disease processes. Disease in senescence is characteristically of multiple and cumulative etiology, which must be sought for the patient's past." It is disheartening however, that much of the changes are irreversible, but it is the duty of the physician to see that they are understandable.

Geriatrics has become a new specialty of old age, such as pediatrics is the specialty of childhood. The greater expectancy with the increasing scientific understanding of aging in the past 25 years, the old age pensions and the humanitarian aspects of the aged now bring it into prominence such as never before. Journals and books are being published on this subject and I know of no better tome than this book to have at one's elbow in the clarifying of the problems of the aging. The author and coordinator of this book writes well, understandingly, and especially shows wisdom as a coordinator by selecting such outstanding authorities in specialties within this specialty. These different monographs are not so abridged as to be instructive only to a general practitioner, but will elicit the interest of various specialists so that they can get supply parts for the many worn out and broken pieces of the "wonderful one horse shay."

The cardio-arterial system in this strenuous age experiences the greatest wear and tear and is subsequently due to the most lesions, hence he has selected eight authors of outstanding ability for monographs on the different phases of that pathology, these being all written in a very creditable and lucid manner, extolling the values of physical diagnosis, as well as instruments of precision, such as the E.K.G. x-rays and blood pressure readings. Today's therapeutic attitude towards these clinical symptoms are gone into fully and from a practical standpoint.

The dysfunction of the metabolic organs is covered by six specialists in that field. Diabetes, which is eminently a disease for those past fifty years of age, is given a very lengthy portrayal of charts, showing incidences in age, sex and relation to surgical complications of which fifty percent of the diabetics are ultimately likely to have. Treatment is handled in a way that will aid the general practitioner in his care of them.

The hormones wear out in a marked degree as senescence advances. Surgery in the aged is well handled because the surgical complications of the aged are almost parallel to that of the adolescent, but the handling of these cases are fraught with problems that call for special consideration, knowledge and care.

"The soft arteries in a gray cortex" call for an understanding of the mentality and neurological problems so often encountered and where this is most obvious to the layman in passing and subjectively most embarrassing to the patient. No age is accurate time for euthanasia as was purportedly advocated by an imminent physician a few years ago, but kindness, consideration and knowledge of their problems should become the effort of every physician handling these cases.—Lea A. Riely, M.D.

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| COUNTY | PRESIDENT | SECRETARY | MEETING TIME |
|---------------------------------------|---|----------------------------------|---------------------------------|
| Alfalfa..... | G. G. Harris, Helena | C. E. Cook, Jr., Cherokee | Last Tues. each Second Month |
| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | B. B. Coker, Durant | Second Tuesday |
| Beckham..... | H. K. Speed, Sayre | E. S. Kilpatrick, Elk City | Third Thursday |
| Blaine..... | W. F. Bohlman, Watonga | Edward T. Cook, Jr., Anadarko | Third Thursday |
| Caddo..... | C. R. Waterbury, Apache | Jack W. Myers, El Reno | Subject to Call |
| Canadian..... | J. N. Goldberger, El Reno | Royce Means, Wilson | Second Tuesday |
| Carter..... | Roger Reid, Ardmore | R. K. McIntosh, Jr., Tahlequah | First Tuesday |
| Cherokee..... | P. H. Medearis, Tahlequah | | |
| Choctaw-McCurtain- Pushmataha..... | L. E. Gee, Broken Bow | H. D. Wolfe, Hugo | Fourth Thursday |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Second Tuesday |
| Comanche..... | Walter Wicker, Lawton | Charles Green, Lawton | Third Friday |
| Cotton..... | A. B. Holstead, Temple | Mollie Seism, Walters | |
| Craig..... | J. M. McMillan, Vinita | D. H. Olson, Vinita | Second Tuesday |
| Creek..... | Frank H. Sisler, Jr., Bristow | Carl W. Bowie, Bristow | Third Thursday |
| Custer..... | Floyd Simon, Clinton | J. H. Tisdal, Clinton | Fourth Thursday |
| Garfield..... | Byron J. Cordonier, Enid | Roscoe C. Baker, Enid | Wed. before 3rd Thur. |
| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Third Thursday |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
| Greer..... | Van S. Parmley, Mangum | J. B. Hollis, Mangum | First Wednesday |
| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | |
| Haskell..... | William S. Carson, Keota | C. M. Bloss, Holdenville | First Friday |
| Hughes..... | Imogene Mayfield, Holdenville | Ruth Annadown, Holdenville | Last Monday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Second Monday |
| Jefferson..... | H. A. Rosier, Waurika | O. J. Hagg, Waurika | Second Thursday |
| Kay-Noble..... | D. M. Gordon, Ponca City | C. W. Arrendell, Ponca City | |
| Kingfisher..... | H. Violet Sturgeon, Hennessey | Henry C. Trzaska, Hennessey | |
| Kiowa-Washita | A. H. Bungardt, Cordell | Aubrey E. Stowers, Sentinel | |
| LeFlore..... | Charles Cunningham, Poteau | G. W. Hogaboom, Heavener | First Wednesday |
| Lincoln..... | U. E. Nickell, Davenport | Ross P. Demos, Stroud | Third Tuesday |
| Logan..... | Webber Merrell, Guthrie | Phillips R. Fife, Guthrie | |
| Mayes..... | E. H. Werling, Pryor | Paul B. Cameron, Pryor | |
| McClain..... | Ralph Royster, Purcell | W. C. McCurdy, Jr., Purcell | Third Thursday |
| McIntosh..... | F. R. First, Jr., Checotah | W. A. Tolleson, Eufaula | |
| Muskogee-Sequoiah- Wagoner..... | L. S. McAlister, Muskogee | Eugene M. Henry, Muskogee | First Tuesday |
| Northwestern..... | R. G. Obermiller, Woodward | C. W. Tedrowe, Woodward | 2nd Thurs. Even Mo. |
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| Oklahoma..... | Onis George Hazel, Oklahoma City | Gerald Bednar, Oklahoma City | Fourth Tuesday |
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| Osage..... | G. W. McDonald, Pawhuska | S. B. Leslie, Jr., Okmulgee | Third Thursday |
| Ottawa..... | Rex Graham, Miami | C. S. Stotts, Pawhuska | Second Thursday |
| Payne-Pawnee..... | Howard Puckett, Stillwater | W. Jackson Sayles, Miami | Third Friday |
| Pittsburg..... | G. R. Booth, Wilburton | C. M. Rippy, Stillwater | First Wednesday |
| Pontotoc-Murray..... | E. M. Gullatt, Ada | Homer C. Wheeler, McAlester | 1st and 3rd Wed. |
| Pottawatomie..... | J. N. Owens, Jr., Shawnee | Ollie McBride, Ada | Third Wednesday |
| Rogers..... | Roy Melinder, Claremore | F. C. Gallaher, Shawnee | |
| Seminole..... | J. D. McGovern, Wewoka | P. S. Anderson, Claremore | Third Wednesday |
| Stephens..... | A. J. Weedn, Duncan | Mack I. Shanholtz, Wewoka | Third Wednesday |
| Texas..... | Glenn A. Hopkins, Guymon | W. R. Cheatwood, Duncan | |
| Tillman..... | F. P. Fry, Frederick | Ronald McCoy, Guymon | Second and Fourth Monday |
| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | O. G. Bacon, Frederick | |
| Washington Nowata..... | Felix Adams, Nowata | John G. Matt, Tulsa | Second Wednesday |
| Woods..... | John F. Simon, Alva | Mr. Jack Spears, Exec. Secty. | Odd Months |
| | | C. L. Johnson, Jr., Bartlesville | |
| | | W. F. LaFon, Alva | |

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

PRINCIPLES OF MEDICAL ETHICS CHANGED BY ACTION OF HOUSE OF DELEGATES

Elsewhere in this issue of the Journal appears The Principles of Medical Ethics of the American Medical Association which were adopted by the House of Delegates of the A.M.A. at the Atlantic City meeting. Each member of the profession should study calmly and judiciously these principles.

The art of medicine is embodied in these principles and if medicine is to survive, the art of medicine must reach the same prominence as the science of medicine.

There have been certain changes in the principles and particular attention should be given to Chapter I and Chapter III relatives to "Educational Information Not Advertising" and "Contract Practice."

The Principles of Medical Ethics as now in force for the profession will soon become available in booklet form and every effort will be made to secure a copy for every member of the Association.

WHAT DOES POOR BASKETT DO NOW?

In the *British Medical Journal* of July 19, 1919, B. G. M. Baskett laments the Insurance Act, but found it necessary to bow to the State. But to his everlasting credit is this brave declaration which must have comforted his conscience as he complied with the bureaucratic controls. In the light of what has happened, we can credit him not only with the courage of his convictions, but with wisdom akin to prophesy.

"SIR.—The menace of the Insurance Act to medical interests was so flagrant that for very shame the Government felt bound to devise machinery to protect us against themselves. The product of their ingenuity and of their justice was the Panel Committee; for which we, not they, must pay, however expensive our own means of defence may be; and for which many, if not most of us, must vote (if at all) by the scriptural method of the lot and prayer. Strangers to their very names, we have no other means of knowing their opinions and their capacities.

"The particular committee which defends me has sent me a circular urging me to join a trade union. It is characteristic of the Insurance Act that it makes the pay a more prominent question than the patient. But it is none the less a shock to find the position that we are a class apart, whose interests are in conflict with the State's frankly accepted by men who represent that tradition of self-effacing service which distinguishes a profession from a trade.

"The man is blind, either wilfully or through political obsession, who does not see the superiority, from a public health point of view, of that system which, while exacting fees from the individual, raises his standard of living, and so tends to raise — and has in the past raised — the wage rate of his class, over that system which, while pretending to grant him medical attendance free, really exacts back the whole cost with cruel interest, and so tends to depress — and does in the present depress — the wage rate of his class as a whole.

"When a man is paid by the State, unless his work is essentially a part of State function, as, for example, a soldier's or a judge's, his interests must conflict with those of the community, especially of the poorest part thereof, who feel taxation most. It is the most malign feature of the Act that it establishes this conflict between us and the poor, of whom we have hitherto, we may justly boast, been reckoned the firm friends.

"No right-minded man can bear, at this crisis especially to think that he is adding one penny to the burden of the State. His first and overwhelming duty is to save for it every penny he can. Into this atrocious dilemma the Act has forced us: We must either submit to underpay, or we must add to the burden of the poor. We do not get enough; they already pay too much."

"To make the Act voluntary would make it possible for us again to obtain proper pay without oppressing the poor, and make it once again possible for the poor to provide for themselves. The Council could do this in twelve months if they would, but

they have fallen sick with the prevalent bulimia for officials. It remains for us of humbler pretensions but of more knowledge of the problems of the poor to see that Germany, vanquished in the military, does not win in the political, field. It does not even need a united profession for that. A hundred men, joining in various quarters in a fierce systematic and sustained attack on the Act, especially using the lay press, can create a suspicion and a mistrust which will make voluntarism a test question at the next election."

STREPTOMYCIN IN TUBERCULOSIS

Since 1944 streptomycin has been under consideration in the treatment of tuberculosis. Unfortunately, many questions have arisen in connection with its clinical application and these questions have not been adequately answered.

We know that acute types of pulmonary tuberculosis and acute spreads from old pulmonary lesions respond more satisfactorily than the chronic types; we know that cavities seldom close without associated collapse therapy; we know that some of the extra-pulmonary lesions exhibit prompt spectacular improvement; we believe that the original dosage was unnecessarily large and the injections entirely too frequent. In the average case one-half to one gm. daily divided into two doses or given in one seems sufficient. When given in this way, toxic effects are rare but the patient's response to the drug should be watched closely. There is some difference of opinion about the optimum duration of treatment. The type of case and the response to treatment may help to decide the question of duration. The average is eight to fourteen weeks. We know the tubercle bacilli may become streptomycin resistant thus interrupting any favorable progress otherwise achieved.

As clinical data accumulates we know that in streptomycin we do not have a specific for tuberculosis and that the response in many cases is quite disappointing. In some cases showing immediate improvement the disease may reach a stationary stage and the symptoms and signs continue while the sputum remains positive. This suggests that the tubercle bacillus may acquire sufficient resistance to streptomycin to turn success into defeat. Also we may have much to learn about the future of the streptomycin resistance and what we may expect in those who are infected by the resistant bacillus. By the use of the newer antibiotics and the

combination of other drugs with streptomycin the development of this resistance may be inhibited. It is too early to speak dogmatically about these possibilities.

This bag full of tricks has never been irretrievably trapped and even now we must remember its devious ways and its surprising strategies and tincture our optimism with vigilance.

At the risk of sounding a more discouraging note may I say that regardless of the antibiotics and all other therapeutic measures for a long time to come those who know the tubercle bacillus can imagine this little man killer demanding his pound of flesh and saying with Shylock, "If you prick me do I not bleed, if you tickle me do I not laugh, and if you wrong me, do I not revenge?" And furthermore, we can imagine this hard pressed bacillus grimly retorting, "The villany you teach me I will execute; it shall go hard; but I will better the instruction."

MEDICINE AND GOVERNMENT

Since the free, sleepless, critical spirit of medicine cannot survive without free initiative and independent action it behooves the individual physician to become increasingly interested in the three branches of his government.

In "Rights of Americans"¹ our own ex-governor William H. Murray sounded a warning, made plain the penalty, presented a prayer and thus became prophetic.

"But, alas! A King arose, and then an Emperor, with despotism and tyranny; the City Democracies destroyed and all powers centered in the Imperial Capital City. In but seven centuries there were no more mathematicians, no more orators, poets, or philosophers — all great genius and spirit of soul were crushed by the Iron Heel of Tyranny and oppressive Government."

... "Whatever be the plans of the enemies of our form of Government, whether by abdication of powers by Congress; usurpation of power by the Executive; brow beating and intimidating the Courts, or by increasing the number and "stacking" the Court — may He who stilled the tempest and the madness of the multitude overrule their plans and purposes, whatever they may be.

"Palsied be the hand and paralyzed the tongue of any American who deliberately and purposely violates the Constitution of his Country."

1. Murray, William H. (Alfalfa Bill). *Rights of Americans Under the Constitution of the Federal Republic*. Boston, Meador Publishing Company, 1937.

THE SEEN AND THE UNSEEN

If President Truman could read Barnett's, "The Universe and Dr. Einstein" and understand it, he would conclude that only debt and death fall among the realities of life and having already helped to heap up the biggest debt the world has ever known, doubtless with some anxiety, he would be wondering what next. But in the world of relativity and the Quantum Theory one cannot be sure when even a good case of the jitters becomes a reality. Yet this state of uncertainty is not new. Plato described truth as "nothing but the shadows of the images." St. Paul said, "Things which are seen are temporal . . . things not seen are eternal." And that "The world was created by the word of God so that what is seen was made out of things which do not appear." With mind and body composed of the same particles appearing in the dark dust clouds of interstellar space and standing as he does halfway between macrocosm and microcosm the President is no bigger than any other human mass of dark dust particles occupying the same position, apparently the only position for such masses, and realizing that questionable mandates have no identity in this new world of the physicists and that debts have a definite limit, he should be content to think on death. Socialized medicine is not the way out. It has never prolonged life.

"NEW NEWS EVERY DAY"

"I hear new news every day, and those ordinary rumours of war, plagues, fires inundations, thefts, murders, massacres, meteors, comets, spectrums, prodigies, apparitions, of towns taken, cities besieged in France, Germany, Turkey, Persia, Poland, etc., daily musters and preparations, and such-like, which these tempestuous times afford, battles fought, so many men slain, shipwrecks, piracies, and sea-fights, peace, leagues, stratagems, and fresh alarms. A vast confusion of vows, wishes, actions, edicts, petitions, lawsuits, pleas, laws, proclamations, complaints, grievances are daily brought to our ears. New books every day, pamphlets, currantoes, stories, whole catalogues of volumes of all sorts, new paradoxes, opinions, schisms, heresies, controversies in philosophy, religion, etc."

This is from *The Anatomy of Melancholy* which according to Sir William Osler is "the greatest medical treatise written by a layman." Since it was written over 300

years ago it is being reproduced with the hope of mitigating to some extent our present day melancholy. But even Burton said, "I was much moved to see the abuse which I could not mend."

ROUND ONE

A most hopeful sign for the preservation of the freedom of the American people appeared on the Washington scene August 16, 1949. On that date the United States Senate, by an overwhelming vote of 60 to 32, rejected President Truman's "Reorganization Plan No. 1 of 1949",* presented to Congress as a recommendation of the Hoover Commission. The most hopeful thing about the Senate action is that establishment of a Welfare Department, a step toward a Welfare State, was soundly defeated.

All persons, especially the medical profession, should recognize two important elements in the struggle against state socialism, not clearly apparent before August 16. First, it should be realized that the approach toward the welfare state is being made by a multitude of devious and obscure means, typical of which was "Reorganization Plan No. 1". Second, all who are fighting for individual liberty should now realize that all is not lost. With concerted and vigorous action by even so small a group as that which personally carried the battle against "Reorganization Plan No. 1" to their Senators, it is still possible for us Americans to be instrumental in shaping the destiny of our government.

It is now almost certain that this Congress will not take definite action on the many proposals for compulsory health insurance. Lest, however, any should be tempted to relax their efforts, it should be borne in mind that succeeding sessions of Congress will no doubt parallel the present one. Those within the government and without who are attempting to produce a revolution of evolution will be at work early and constantly and will again strike at the foundations of American freedom and liberty through every means within their power; through reorganization of the functions of government; through well devised and well concealed plans for wresting from the people their constitutional rights and placing increasingly greater control in the federal bureaucracy.

This is surely the time to take hope and yet renew the battle with increased vigor.

*The people and the profession are indebted to Senator Thomas for his part in this defeat.

SCIENTIFIC ARTICLES

TECHNICAL PROCEDURES IN THE MANAGEMENT OF DISEASES INVOLVING THE SINUSES*

CHARLES D. BLASSINGAME, M.D.

MEMPHIS, TENNESSEE

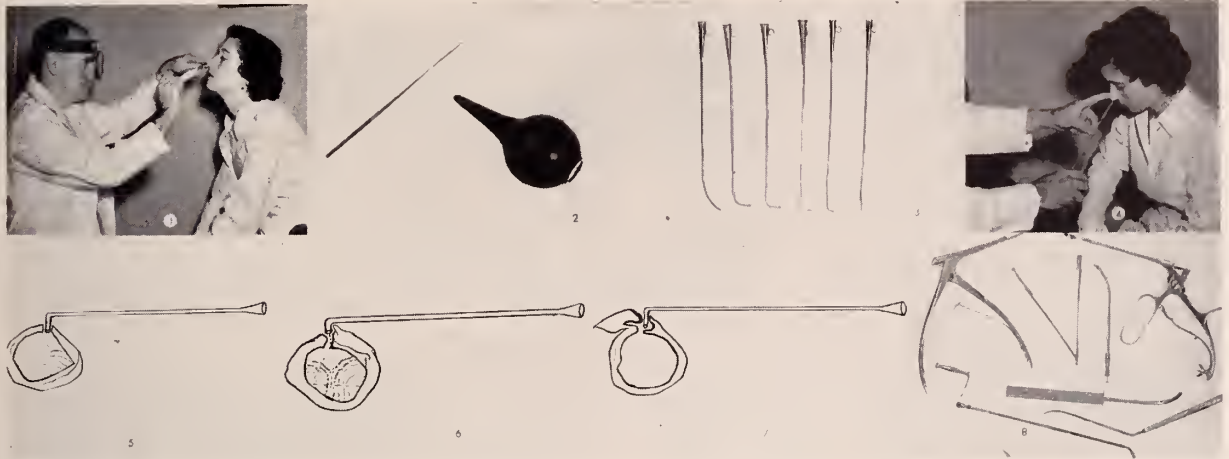
The nasal accessory sinuses, because of their peculiar anatomical and physiological characteristics, present technical as well as therapeutic problems in the management of sinusitis. The therapeutic management offers the best results in the acute phases of the disease, while the technical procedures, except as applied in acute blocked sinuses, are carried out in the subacute and chronic stages. It is the purpose of this paper to discuss those technical procedures which we have found to be of great value in our practice. A full discussion of the clinical phases of sinusitis to which special technical procedures are applied would require more time than is allotted to us. It should be noted, however, that the purpose of all technical procedures which are applied in the field of otolaryngology in the management of sinusitis in all its phases fall under three headings: 1. Obtaining pathologic material from the interior of the sinuses for diagnostic study. 2. Removing pathologic material from the interior of the sinuses for its curative effect. 3. Interrupting the continuity of the walls of a blocked sinus so that pressure within the sinus may be relieved and drainage from the sinus established. The accomplishment of this three-fold purpose is carried out in the office practices and in the hospital operating room techniques. There is a wide variation in techniques employed, particularly with reference to office procedures. I wish today to emphasize the office procedure which I personally have found to be the most expeditious and practical, during the past 20 years, viz, irrigation of the maxillary sinuses by way of the normal or accessory ostia. While some phases of this discussion may appear repetitious to many, I feel that the

basic value of the procedure warrants whatever elaboration I may be able to give, even at the expense of being repetitious.

In carrying out the technique for this procedure, I have found that it is most important to give emphasis to certain details which may appear of minor importance in themselves but are essential to its complete success. For example, the position of the doctor with reference to his patient should be that shown in Fig. 1. The doctor is facing the patient squarely, his position being at a very comfortable distance away. The patient is sitting back in the treatment chair facing the doctor squarely and inclined forward so that his face is in easy reach of the doctor's hands for the necessary manipulations. The patient will readily assume this position if the doctor will gently place his left hand on the patient's right shoulder and with a slight pressure ask him to please lean forward. In this position the doctor is well balanced and can have the greatest freedom of his hands which is essential to the success of the procedure. In the meantime, every effort should be made to reassure the patient so as to remove any fear or timidity. The full cooperation of the patient is necessary for the success of the procedure.

The doctor, having taken these primary steps, begins by shrinking and cocaineizing the middle meatus. Shrinkage is accomplished by packing the nose with one-half per cent ephedrine in one-half per cent cocaine. Cocaine in 20 per cent solution is then applied in cotton wound about a curved applicator, shown in Fig. II. Sufficient cocaine should be applied to give anesthesia and at the same time small enough in quantity to avoid over stimulation of the patient. The applicator used in applying the cocaine may at the same time be used so as to acquire

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association May 16, 1949.



valuable information about the depth and topography of the middle meatus and in many cases the exact location of the ostium.

After the mucous membrane in the area of the middle meatus has been contracted and anesthetized, the operator must decide which type of cannula most conforms to the anatomical markings of that area, previously determined during the preparatory cocaine procedure. Fig. III. The selected cannula, held by the thumb and first two fingers of the right hand is introduced into the middle meatus at its curved end. The tip of this curved end is moved backward and forward in the bottom of the middle meatus, manipulated so as to accommodate itself to all possible angulations as it moves along. When a depression is felt, an attempt is made, without undue pressure, to enter the ostium. A successful entrance may necessitate the change of direction of the end of the cannula one or more times in its advancement in entering the cavity of the antrum. The question may be asked, "How do you know when the cannula is in the proper position for effective irrigation?" The following criteria establishes the answer to that question. 1. The irrigating fluid, when forced into the sinus, returns after the elapse of an interval of time sufficient for the sinus to have been filled. 2. A peculiar sound, which I call the antrum growl, is produced by the vibration of the membranous part of the antrum wall as fluid and air return from the antrum cavity. 3. The content of the pathological sinus is returned in the irrigating fluid in a short interval of time. 4. The cannula rolls easily between the fingers indicating that the point is free in the sinus cavity. 5. Pain is felt around the upper teeth corresponding to the antrum being irrigated.

The presence of any one or more of the above criteria will confirm the effective position of the cannula with reference to the ostium. If a free entrance is made, the receiving end of the cannula is then transferred to the grasp of the thumb and middle finger of the left hand, while the end of the index finger of the left hand rests upon the right side of the patient's nose for stability and fixation. Fig. IV. A three ounce rubber bulb, containing saline solution is attached to the receiving end of the cannula. The fluid is forced into the sinus by pressure on the bulb. When the antral cavity is completely filled, further pressure upon the bulb creates a force within the sinus, having complex reactions, as illustrated in Fig. V. The force of the fluid as it leaves the cannula is exerted along a straight line until it strikes the opposite wall of the sinus. It is then deflected at an angle corresponding to the angle of incidence. The reflected force from each point of contact of the stream of fluid carries with it the exudate lying in its path. Since the ostial opening represents an area of least resistance, the fluid carrying with it the exudate will escape from the sinus and be recovered in a suitable receptacle held for the purpose by the patient. Owing to the anatomical configurations of certain ostia, complete penetration of the cannula into the sinus cannot be successfully accomplished. However, a partial penetration may be effected and sufficient fluid introduced by adequate force to accomplish successful irrigation of the sinus Fig. VI. In such instances the rationale of the procedure is readily visualized from physical laws governing the force of fluids and can be further attested by its successful application in my practice. In many instances, the complete or partial en-

trance of the cannula into the ostium of the sinus may be greatly facilitated by directing the opening of the cannula against the floor of the middle meatus, at the same time expelling fluid by pressure on the bulb. The proximity to the normal ostium can be readily established by a decrease in the resistance to the flow of the fluid as this area is approached. This is a simple but in many cases a very effective maneuver. In a small percentage of patients, the ostia cannot be entered either completely or partially. However, even here an incomplete irrigation may be accomplished. This is brought about by the pressure of the fluid projected from the cannula in the direction of the ostia so that it enters the sinus cavity with sufficient force to liberate the contained exudate which becomes available for diagnostic study. At the same time, the fluid thus introduced, by dilution of the remaining exudate, aids in its subsequent evacuation. Furthermore, it has been my experience that in certain cases of subacute maxillary sinusitis, having marked edema of the membranous portion of the meatal wall of the sinus, contrary to expectation, successful irrigation is carried out with ease, the cannula passing through the ostia into the sinus cavity, whereas after the edema has subsided, entrance into the sinus cavity is accomplished with greater difficulty. The explanation which suggests itself for this phenomenon is by assuming that the edematous tissue in the floor of the hiatus semilunaris elevates the point of the cannula into the recesses marking the position of the ostium. Fig. VII.

A second technical procedure which I use in the management of an acute maxillary sinus in which the ostium of the sinus is blocked by edema and alarming symptoms appear, is the trephining of the inferior meatal wall of the sinus with the Thornwald trephine instrument. Fig. VIII. After shrinkage and cocainization, the curved end of the instrument is placed in the most receding portion of the meatal wall next to the attachment of the inferior turbinate. The end of the instrument is placed per-

pendicularly against the wall of the sinus and the phalange is placed longitudinally with the nose. Enough pressure is exerted directly toward the bone to all but crush through. At this point the handle of the trephine is turned to the right and the instrument cuts through with only slight resistance. Through this opening a cannula may be inserted daily for subsequent irrigations, and also continuous drainage is provided until the acute sinusitis has had time to subside.

The intranasal window resection of the maxillary sinus, when indicated, is carried out by the following techniques: After properly cocainizing the inferior meatus with 20 per cent cocaine solution or the administration of a general anesthetic, the mucosa of the area having been shrunk with adrenalin, an initial opening is made with the Thornwald trephine instrument, as for a simple trephine of the sinus. This opening is slightly enlarged by inserting a small rasp, Fig. VIII, and rasping forward and downward. When the opening has been sufficiently enlarged, a Yankauer antrum forceps, Fig. VIII, is inserted and the whole inferior meatal wall is removed down to the floor of the nose without allowing any tags to remain. The operation may be expedited, after a partial removal of the wall by the Yankauer forceps, by using a Mosher ethmoid forceps, Fig. VIII, for enlarging backwards and a Kerrison forceps, Fig. VIII, for enlarging forward. It is very important to avoid leaving tags of tissue attached to the periphery of the opening. The window resection performed in this manner will remain open permanently.

I have chosen to confine my paper to the consideration of the three office procedures, the irrigation of the maxillary sinus, by way of the natural or accessory ostium, the trephine operation of the maxillary sinus and the window resection of the maxillary sinus, which may be an office or a hospital procedure. The discussion has been confined to certain points in technique which I consider essential to the success of the procedure.

Don't forget AMERICAN COLLEGE OF PHYSICIANS REGIONAL MEETING

Oklahoma City, Okla.

September 10

THE MANAGEMENT OF YOUR PATIENTS WITH EYE PROBLEMS*

DONALD V. CRANE, M.D.

TULSA, OKLAHOMA

The management of patients with eye problems is a topic which is growing more important daily. Physicians in every branch of medicine are more and more frequently being asked for treatment of eye conditions. The purpose of this paper is to increase our abilities in the solution of the problems related to the visual function, comfort and efficiency of the patient.

In our state, we have a fortunate preponderance of general practitioners and I want to encourage them to treat and handle successfully their eye patients. In the complex act of the general practice of medicine there is the ever present question of what patients should be treated and what patients should be referred to the specialist. This question is modified by several factors, among which are: the diagnosis, the accessibility of an ophthalmologist, the financial status of the patient, etc. All physicians should be stimulated to include in the examination of their patients as much history and physical examination of the eye as possible. Here we have an organ serving the function of our most important special sense and vision is vital to the patient both socially and economically. The eye is directly connected with the fore brain by the optic nerve and it and the lids receive sensory and motor supply from the second through the seventh cranial nerves inclusive. In addition, there are intimate connections to the vestibular portion of the eighth cranial nerve and to branches of the vagus. This means that the eye is supplied by eight out of the 12 cranial nerves and this should re-emphasize its importance to us in the function of the individual.

Within easy reach of every physician is a determination of a patient's vision. This is readily done by using a properly illuminated Snellen chart. Any significant reduction of visual acuity should prompt the

examiner to further investigation. The adnexae and the external aspect of the eyeball are readily accessible to careful inspection by the examiner and the frequent use of the ophthalmoscope can be highly recommended for investigation for the interior of the eye.

There is no reason why any doctor here cannot take good care of the usual external disease of the eye or its adnexa if he so desires. Conjunctivitis, blepharitis, styes, chalazia, some benign tumors, injuries of mild degree, and corneal ulcers not in the pupillary area all can be readily treated by the general practitioner. Simple foreign bodies of the cornea are removed under anesthesia with one-half per cent Pontocain, good illumination and magnification and the careful use of a suitable instrument. Thorough removal of all of the embedded rust-like material is necessary to the prompt healing of the site of the injury. The frequent use of a local antiseptic after the removal will aid in recovery. More severe injuries to the globe are often complicated by intra-ocular lesions and, when the latter are present, an ophthalmologist should be consulted.

It is probably not best for the general practitioner to treat intra-ocular pathology. The diagnosis is occasionally in question and, if at all possible, patients with decreased vision and/or intra-ocular pathology should be referred. This group would include iritis, cataract, retinal changes such as the presence of exudates or hemorrhages, optic nerve lesions, vitreous opacities, degenerative changes within the eye, and intraocular tumors. The role of the general physician in these cases is one of value for early diagnosis and then proper referral of the patient. Because of the intimate relationship between eye pathology and systemic disease, the general practitioner often is the one who can first detect eye changes in early systemic disorders. Diabetes and

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hypertension are outstanding illustrations of this group of patients and close fraternal co-operation between the general practitioner and the ophthalmologist will be of considerable benefit to the patient. One of the most significant features about a careful eye examination is that the condition of the tissue and any departure from normal observed in the tissue can carefully be studied by direct view. This often can mean much more than many laboratory procedures, blood pressure determinations, or other methods of examination.

Of special interest to the physician should be glaucoma. We all should be constantly alert to any eye symptom which would cause a suspicion of this dreaded condition which accounts for more loss of vision after the age of 50 than all other causes combined. Pains in the eye, attacks of blurred vision or redness, decreased night vision and the necessity to change glasses to correct presbyopia more frequently than every year or more should arouse suspicion of an increased intra-ocular pressure.

Of particular interest is the question of crossed eyes. In this field the physician can render invaluable service to his patients by stressing the importance of early study of children with crossed eyes. The function of sight is the result of an unbelievably complex process of learning. Deviation of the eyes from parallel results in the suppression of the image of one eye by the brain to avoid the occurrence of double vision. If this suppression is practiced in the years up to about nine years of age, the brain fails to become trained to see and as a result, vision is permanently lost in the deviating eye. The remedy for this sad occurrence is to cover or occlude the fixing eye and thereby allow the crossed one to become trained in the function of seeing. This must be done before the child is nine and every physician here should actively encourage the patients he contacts to have children's eyes thoroughly examined. The preferred

age for this is when the child is about four years old. The value of good vision to the child is hard to realize unless we remember that over 80 per cent of our knowledge is obtained through our sense of sight. The correction of unequal refractive errors and significant degrees of astigmatism and farsightedness by glasses are matters of great importance to the child's learning and welfare. In many cases, we also have the problem of loss of vision in a child simply as the result of disuse of the eye due to a badly focussed image. The use of glasses can correct this.

The relationship of the ophthalmologist to other specialists in the branches of medicine is a definite and significant one. For example, in the instance of the obstetrician, such conditions as detached retina in patients with toxemia, pituitary swelling, and complicating refractive changes all are of interest to the eye man. The prognosis and analysis of patients with pre-eclampsia and the advisability of future pregnancies following the occurrence of toxemia with nephritis, all can be studied most adequately by joint co-operation with the ophthalmologist. Because of the embryological development of the retina directly from the brain, the relationship of neurosurgical problems to ophthalmology is obvious. Any patient with pituitary disease and all those suspected of increased intra-cranial pressure should have an examination of the field of vision and an ophthalmoscopic examination of the optic nerves.

In closing, I would like to encourage a closer co-operation between all physicians and the ophthalmologist. The amount of information which can be obtained from a careful examination of a patient's eyes is all too frequently under-estimated. Let us not forget that here we are not only able to examine the living tissue in its natural state, but also to determine changes which have occurred in it as the result of disorders of the general system.

TWENTY-FIVE YEARS AGO

Dr. William Patton Fite, and family, Muskogee, are visiting Colorado points.

Dr. C. D. Dale, Caddo, has received the appointment as County Health Officer for Bryan County.

Ardmore recently had a children's clinic, under the auspices of the Rotary Club, conducted by Drs. Earl D. McBride and A. M. Young, Oklahoma City, assisted by a number of local physicians and surgeons. Sixty-three patients were examined and the proper recommendations made.

CONGENITAL ANOMALIES OF THE EYES*

FRED D. SWITZER, M.D.

HUGO, OKLAHOMA

In studying the various congenital abnormalities of the eyes, we should keep in mind the embryonic origin of the ocular tissues. The epithelium of the cornea, conjunctiva and lens is derived from the ectodermal covering of the embryo; the optic nerve and retina from the neural ectoderm; and the remaining tissues, with the exception of the vitreous which is now regarded as ectodermal, from the mesoderm.

Beginning with the lids, the most extreme anomalies are ablepharon in which the lids are entirely absent, and ankyloblepharon in which there is an adhesion between the two lids varying from complete adherence to a few persisting threads of tissue. For the latter simple section is sufficient treatment, while section and plastic repair is necessary for the more marked cases. Coloboma which is supposedly due to pressure during development, usually affects only the upper lid and may be only a slight notch in the lid border or may involve almost the entire width of the lid. Treatment consists of freshening the edges of the smaller defects, and approximating the layers of the lid with sutures. Grafts are necessary for the larger defects.

Epicanthus may occur as a semilunar fold of skin at the inner canthus, and in milder cases is of no consequence, though in others there may be more marked deformity, particularly when associated with ptosis. When surgery is required the Wheeler operation is most commonly used. More of a rarity is epiblepharon and when large this fold of skin bedow the lash border of the lower lid may require surgery because of inward displacement of the lashes.

Ptosis is fairly common and is the result of defective or absent innervation of the striped muscle levator, frequently accompanied by weakness of the superior rectus. Heredity is a definite factor. Surgical treatment should be begun during the first three years in the more severe cases though it may

be postponed in the others. The operation must either advance the levator as is done by the Blascovics or Lindner technique; replace the levator with the frontalis by use of Hess sutures, by Lancaster or Blair fascia lata transplant, or by Machek or Reese method of using strips of skin from the eyelid; or finally replace the levator by the superior rectus as is done in the Motaïs operation.

Probably the rarest of all the anomalies of the lids is distichiasis in which there are two complete rows of cilia, usually in all four lids, causing irritation by corneal contact.

Among conditions which may be met with in the lacrymal apparatus is stenosis of the nasolacrimal duct which may be relieved by probing with a number 8 to 10 Bowman probe. However, if the obstruction is complete and the excessive lacrimation is sufficiently annoying a dacryocystorhinostomy may be necessary. Of less frequent occurrence are absent or occluded puncta or the presence of two puncta in a lid. The only congenital neoplasms of the lacrimal gland are the slowly growing teratomata, which occur berind the orbital septum producing exophthalmus downward and inward. These are removed through a brow incision into the posterior orbit.

Congenital corneal abnormalities include microcornea which is usually associated with microphthalmus and a resultant hyperopia, or even chronic glaucoma in later years. In contrast there may occur megalocornea with the corneal diameter sometimes reaching 15 mm. by the time the individual is grown. Myopia is almost invariably present. Another familial condition but one of no consequence is arcus juvenilis.

The only hereditary scleral anomaly is the blue sclerotic which is due to absence of certain tissue in the sclera with the uveal pigment becoming visible. Over half of these cases are associated with orthopedic anomalies.

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The iris not infrequently has variations of pigment. In albinism it may be absent from the choroid and retina as well as from the iris with poor fixation and nystagmus. Treatment consists of refraction and the prescribing of tinted lenses. Nevi or benign melanomata may occur but only rarely do they undergo malignant changes. Heterochromia in which the eyes differ in color is a fairly common condition.

In aniridia the iris is almost entirely absent though there is a persistent rim of tissue hidden at the ciliary border. There may be variations in the pupil such as corectopia or eccentric displacement usually nasally, and polycoria in which there are other openings in the iris besides the pupil. In congenital coloboma there is a pear shaped defect in the iris corresponding to the fetal choroid cleft. If the choroid is also involved vision is usually defective. Persistent fetal pupillary membrane is very common though in most instances it can only be seen with the slit lamp. If there is enough of the membrane to interfere with vision a partial iridectomy may be done.

During fetal development there may be a blocking of the angle of the anterior chamber from failure of the iris to separate from the corneo-sclera, resulting in failure of lymph filtration and buphthalmos or congenital glaucoma. In these infants there will be corneal edema, large fixed pupil, deep anterior chamber and increased palpable tension with involvement of one or both eyes. Though treatment in many of these cases is unsuccessful early surgery offers the only hope of relief. Corneoscleral trephining and iridencleisis are the most commonly selected procedures. Iridectomy and miotics are useless.

Anomalies of the choroid consist of choroidermia in which the entire choroid except for a small central portion is absent, and coloboma is seen as a large semi-oval blanched area producing a corresponding field defect. When involving the macula there is a large central scotoma and marked loss of acuity. Treatment of these choroid defects consists of corrective lenses and visual training.

There may be a failure in development of retinal function unilaterally with marked refractive error in that eye, and a wide difference in correction between the two eyes. In these cases of congenital amblyopia there are no ophthalmoscopic findings but there is usually a relative central scotoma. Some-

times small grayish-black spots of pigmentation are seen in the retina similar to the melanomata in the iris and are of no consequence.

Coloboma of the optic nerve is rare though may be seen occasionally as a defect in the disc, possibly associated with coloboma of the choroid. Medullated nerve fibers are much more common and may enlarge the blind spot though they seldom affect the central vision.

Congenital disturbances of motility may occur due to absence or abnormal insertion of one or more of the extrinsic muscles. Squint is sometimes encountered as a result of congenital spastic paralysis (Little's disease). The concomitant convergent squint in the latter cases is probably due to subdural hemorrhage from difficult labor.

Color blindness may be congenital and is either total or partial. The former is very rare and is likely due to defective development or absence of cones. Partial color blindness is inherited through the female parent and is usually manifested by red-green confusion.

The most interesting, important and complex of the congenital anomalies are those involving the crystalline lens. Abnormalities resulting from germinal influence are likely to appear in several generations, and their incidence is increased by inbreeding. Besides hereditary influence there may be environmental factors within the uterus, either chemical, mechanical, or inflammatory to produce developmental anomalies.

A fairly commonly encountered condition is the persistent remains of the hyaloid artery attached to the posterior lens capsule, frequently extending back chord-like to the optic disc. Parts of the tunica vasculosa may persist on the posterior or anterior capsule and if posterior they are seen as dark lines through the dilated pupil.

True congenital aphakia is extremely rare but it has been proved without doubt that it can exist. Coloboma of the lens is also rare clinically and shows no hereditary tendency though it is more common in the male. There is a refractive error, usually myopia, and opacity or even dislocation will occur in a small percentage of cases.

Congenital ectopia lentis is another abnormality of growth, is nearly always bilateral, and symptoms depend upon the degree of phakia remaining in the pupillary area. These eyes are myopic in the phakic part and astigmatic due to the tilting of the

lens surface. In Marfan's syndrome there is a subluxation of the lens associated with musculoskeletal anomalies, the ocular symptoms being similar to those of simple ectopia. Treatment of these conditions is correction of the refractive error if possible and when satisfactory vision cannot be obtained the dislocated lens should be removed.

Opacity of the lens fibers is the result of any growth defect or any toxic or nutritional damage to the lens during fetal life. Faulty separation of the lens vesicle from the surface ectoderm results in the typical anterior polar cataract. These are usually less than three mm. in diameter and rarely require removal of the lens. The posterior capsular cataract is more dense, and covers a large part of the posterior capsule and the underlying cortex with marked loss of visual acuity. Removal of the lens is indicated when both eyes are involved, but it is best left alone if only one eye is affected.

Embryonal nuclear cataracts are due to a developmental disturbance during the first three months of fetal life, the resulting opacity being confined to the small central embryonal nucleus. The visual disturbance is slight and surgery is not indicated. When the growth disturbance continues longer

than or occurs later than the third month, other zones of increased density appear with the formation of a zonular (or lamellar) cataract. These have a marked hereditary tendency and are usually bilateral. If visual acuity is less than 20/40 but better than this with dilation of the pupil, an iridectomy may be done. Removal of the lens becomes necessary if vision is less than 20/40 with cycloplegia. If the entire lens is opaque at birth with no clear zone of cortex visible, operation should be delayed until the child is about a year old because of possible interference with development of the eye. Post-operative prognosis should be guarded for other anomalies may be present which would also disturb the vision.

In the more common or typical zonular cataract the treatment of choice is discission with removal of the soft cortex four or five days later. The latter procedure is good insurance in preventing secondary glaucoma but can be omitted at the discretion of the operator. A second discission may be necessary four to eight weeks later for any opacity of the capsule. Convex lenses are prescribed later with correction added for near vision since accommodation has been destroyed in removal of the lens.

THE MANAGEMENT OF ANURIA*

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Anuria of renal origin is a grave sign. It may result from irreversible pathologic changes within the kidney or the damage may be of a type which is capable of repair. In an anuric patient it is not always possible to predict the extent an injured kidney may recover, hence management during the anuric phase of any disease is of utmost importance. The recuperative capacity of the kidney should not be underestimated. A great amount of study recently has been devoted to the pathogenesis and treatment of the renal anoxic syndrome or lower nephron nephrosis. Since the renal lesions of this syndrome are generally healed

by the end of two weeks the maintenance of the patient during the anuric phase is vital. From the studies on this type of renal disease a plan of rational therapy based on a better understanding of renal physiology is developing. The general principles of management may well be applied to other diseases in which renal failure of a possible reversible nature is a problem.

The prophylaxis of renal failure in the many diseases primarily renal or with renal complications is a problem in itself. When anuria or severe oliguria occurs however, the management is directed toward sustaining fluid and electrolyte balance as well as opposing nitrogen retention until the injur-

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ed kidneys have recovered sufficiently to resume adequate function. Appropriate treatment of the factors precipitating renal failure varies according to the primary disease. Because of the many functions of the kidney (elimination of waste products of metabolism from the body, conservation of essential minerals, maintenance of acid-base balance, regulation of hydration and certain complex and poorly understood metabolic functions) renal failure produces a multiplicity of physiologic derangements which may cause death even though there remains enough functional renal tissue to sustain life. Some of the basic problems in the general management of the anuric patient will be discussed.

The patient with marked depression of renal function continues to eliminate fluid from the skin and lungs, the so-called "insensible fluid loss". This fluid is estimated from 1,000 to 2,000 cc daily. It varies with the size of the patient and his temperature as well as the environmental temperature and humidity. Additional fluid may be lost from the gastro-intestinal tract by diarrhea, vomiting or gastric suction which may be measured with reasonable accuracy. The daily total of these and other extra-renal sources of fluid loss plus any urine excreted should equal the daily total fluid intake during the period of anuria or oliguria. Fluid in excess of this amount leads to retention of water in the extracellular spaces with resultant pulmonary, cerebral or renal edema. These usually appear before edema is demonstrable externally. Excessive quantities of fluid do not hasten or encourage diuresis. In addition to the clinical appearance, frequent weighing of the patient at the bedside, hematocrit determinations and determinations of plasma protein concentration are useful but not infallible guides to the state of hydration. Determinations of the volume of plasma and extracellular salt water offer more accurate data but are not practicable clinically. The ultimate decision on fluid administration depends on a correlation of the physical findings and laboratory data.

During renal failure retention of sodium and chloride occurs although the serum values for these elements may be decreased. The optimal daily sodium chloride requirement during fasting is still undetermined but it is believed that a slight deficit of extracellular salt is preferable generally to an excess. Excess sodium ion induces extracellular fluid retention. In the presence of

renal damage frank renal failure is sometimes precipitated by the administration of saline solutions. Certainly in the presence of renal failure sodium must be restricted and given only when a definite deficiency exists. Such a situation is rarely encountered. Although serum potassium values are usually elevated during anuria this aspect of electrolyte balance is rarely of clinical importance in the light of our present knowledge. The administration of potassium salts in an attempt to establish diuresis is ineffective and unwise since high levels of potassium are toxic. In most renal diseases, particularly the chronic type, the tendency toward hypocalcemia should be remembered and any calcium deficit relieved before tetanic symptoms appear. Vomiting, diarrhea, intestinal fistulae, disturbances in respiration, et cetera, produce characteristic disturbances in the electrolyte pattern which must be dealt with individually.

The role of the kidney in acid-base balance is reflected in the acidosis which usually accompanies renal failure. Sodium bicarbonate or one-sixth molar sodium lactate solution should be administered in amounts determined by the decrease in carbon-dioxide combining power of the plasma or pH of the blood. The latter is rarely feasible. Three to four grams of sodium bicarbonate daily may be required to maintain an adequate alkaline reserve. The sodium ion thus administered might be considered a necessary evil. Maintenance of electrolyte balance in the presence of renal insufficiency is difficult since the role of the kidney in certain phases of metabolism and ionic shifts is not completely understood. The problem is further complicated by the fact that with our present laboratory methods an accurate evaluation of the electrolyte balance in the plasma and extracellular fluids is not always possible.

The value of some diuretics in the treatment of renal failure has not been determined. Mercurial preparations and ammonium chloride are definitely contraindicated while xanthines are useless. Maitland in 1941 recommended isotonic sodium sulfate solution intravenously for treatment of lower nephron nephrosis and since then others have reported favorable results following its use. From a speculative standpoint, however, one might presume that diuretics of any kind are not the treatment of choice since they force work prematurely on a kidney which already has been severely in-

jured. Might not the result be more favorable if the patient could be maintained in physiologic equilibrium as nearly as possible until some repair of the damaged kidneys has occurred?

General supportive measures during renal failure are essential. Anemia, which is frequently encountered, may be relieved by transfusions of whole blood. It must be remembered, however, that laboratory studies may be misleading as a result of disturbances in fluid balance. Human plasma or concentrated serum albumin are valuable in correcting hypo-proteinemia and maintaining blood volume. In addition, their administration is thought to reduce endogenous catabolic processes to a certain extent. Gelatin, isinglass and other plasma substitutes have not been used extensively. Cardiac failure secondary to renal impairment is a frequent complication. Prompt digitalization should be carried out at the first signs of decompensation but the usual maintenance dose of digitalis must be decreased during the period of inadequate renal function and low urine output. Aluminum hydroxide by mouth frequently aids in decreasing gastrointestinal irritability and phosphate absorption. Daily caloric requirements are met so far as possible by a low protein, low sodium dietary formula providing approximately one calorie per cc if the patient is able to take fluids by mouth. Otherwise dextrose solutions (5, 10 or 15 per cent) in distilled water as determined by the daily fluid requirement are usually sufficient. Amino acids either orally or parenterally are contraindicated. Supplementary vitamins, especially B-complex and C are usually given.

The cause of uremia is unknown and the several attempts to relieve azotemia and its sequellæ by means of temporary substitutes for the filtering surface of the glomeruli have not received sufficient clinical trial to assess their importance in the management of renal insufficiency. Gastric, intestinal or peritoneal lavage have many limitations and the published reports have not been conclusive. The introduction of means for dialyzing the blood outside the body, the "artificial kidney", theoretically gives greater promise of success in removing the end-products of metabolism from the blood. While the artificial kidney is incapable of performing many vital functions of a hu-

man kidney several investigators have noted dramatic clinical improvement following its use. There is little doubt that external dialysis of the blood will become an important part in the treatment of anuria when technical improvements make its application practicable in the average hospital.

Renal decapsulation for relief of anuria has been used rather indiscriminately in the past and the results have been inconsistent. There are those who feel that the same results may be obtained from splanchnic block or spinal anesthesia. The basis for splanchnic block lies in the apparent renal angiospasm associated with lower nephron nephrosis and the dual renal circulation demonstrated by Trueta. There is no evidence at hand to indicate that such measures are of value in the treatment of anuria following other renal diseases.

If the anuric phase of renal disease has been successfully treated new problems in fluid and electrolyte balance arise with the onset of diuresis. These are beyond the scope of this discussion.

The most important problems in the management of renal failure are fluid and electrolyte balance. Next in order of importance are relief of nitrogen retention and nutrition. Some fundamentals in management have been discussed briefly and a few of the methods of treatment have been mentioned. Many questions remain to be answered. Again it should be emphasized that many lives may be saved if the physiologic derangements associated with anuria can be prevented or at least diminished until some repair of the damaged kidneys has occurred. The recuperative power of the kidneys cannot be determined with complete accuracy; it should not be underestimated.

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CLINICAL TUMOR CONFERENCE

University of Oklahoma School of Medicine

ARTHUR PURDY STOUT, M.D., NEW YORK, N.Y.

HENRY G. BENNETT, JR., M.D.: We are fortunate to have a distinguished guest today, Dr. Arthur Purdy Stout, Professor of Surgery, College of Physicians and Surgeons, Columbia University. Dr. Stout has kindly agreed to participate in the discussion of the cases to be presented for consideration in the Clinical Tumor Conference this morning.

1. NEUROFIBROMA (?) OF STOMACH

FRANK E. DARROW, M.D.: L. F., a 58-year-old white woman, was first seen at the University of Oklahoma Hospitals April 21, 1948. She stated that she had symptoms of a peptic ulcer since 1935 and intermittent hematemesis since November, 1937. Past history was essentially negative except for a suprapubic hysterectomy in 1918, for profuse bleeding during menstrual periods.

At the time of admission she was obese and pale. Except for a blowing systolic murmur at the apex, the physical examination was essentially negative. Roentgenologic examination revealed a mass, approximately 8 cm. in diameter, occupying the upper portion of the stomach, with the mucosal pattern obliterated. In three hours the barium had reached the hepatic flexure. The mass was thought to be a bezoar. At laparotomy (by Dr. Clifford C. Fulton) a firm, round tumor mass, 9 cm. in diameter, arising from a pedicle 6 cm. in diameter, was located on the lesser curvature of the stomach. The regional lymph nodes were not enlarged. The liver, small and large intestines revealed no changes. Resection of the mid-portion of the stomach was carried out. The post-operative course was uneventful and she was discharged on the 14th day following operation.

HARRELL C. DODSON, JR., M.D.: The growth was high on the lesser curvature and difficult to expose. The surface of the mass was ulcerated, the pedicle was broad. The

two portions of the stomach were anastomosed.

PETER E. RUSSO, M.D.: The patient was rather obese, the mass was under the ribs and we were unable to palpate it. She said she liked persimmons. Our diagnosis was bezoar in the stomach.

BÉLA HALPERT, M.D.: The specimen was a portion of the stomach with the neoplasm (Fig. 1). The surface of the growth protruded into the lumen and was covered by gastric mucosa. In places there were areas of ulceration from which hemorrhage might have occurred. On the cut surfaces the growth had a fish meat appearance; it appeared convoluted with streaks of whorl-like arrangement of the fibers and contained cavities filled with a necrotic debris and extravasated blood.

On microscopic preparations (Fig. 2) the surface epithelium, as on the gross specimen, was well preserved. The glands extended to the muscularis mucosæ and stopped there. The neoplastic involvement was in the submucosa and muscular coats within a ground substance containing round or elongated cell nuclei in streams and whorls. In other places the cell nuclei were spindle-shaped, and arranged themselves in a palisading pattern. There were areas of necrosis. A section from the opposite surface of the growth showed areas of hemorrhage which, together with the necrosis, we usually associate with a malignant growth. A broad zone of the muscular coat of the stomach bordered the growth as it did the intact mucosa of the inner surface. The diagnosis was: neurofibroma with questionable malignancy.

DISCUSSION

ARTHUR PURDY STOUT, M.D.: Whatever we choose to call it, it is a definite variety of growth that occurs in the stomach. This history is fairly characteristic of it with one exception. Almost half of them get more

of an erosion, a real excavation of the mucous membrane and tumor so that large cavities often communicate with the surface. So that, with barium in the stomach a large filling defect may be revealed such as we see here, but in addition almost half of the patients suffer massive hemorrhage. This variety of tumor is one of the causes of extremely severe gastric hemorrhage. Esophageal varices are probably the commonest cause of gastric hemorrhages. Chronic peptic ulcers, particularly where there is an erosion of a large vein or artery may also cause severe hemorrhage. This tumor perhaps stands third in the causation of these hemorrhages.

Dr. Halpert has supporters for his idea that this is a Schwann cell growth, and that it comes from the cells of the sheath of Schwann of a nerve fiber in the gastric wall. A large monograph was published in French some 20 years ago, on Schwannoma of the stomach. This publication has had a great deal of influence, on the continent and here. I disagree with the diagnosis in almost every case reported in that monograph, and also in this case. I have studied a fair number of these cases using differential stains which bring out myofibrils. In all of them, we found somewhere in the growth, cells containing myofibrils. These are longitudinally disposed, intracellular fibrils which I believe are myofibrils. So, I think this tumor is a smooth muscle tumor.

In regard to malignancy, we have found that in smooth muscle tumors the relative number of cells in mitosis is a fair indication of the malignancy of the growth. The first time that this was investigated was at the Mayo Clinic some 29 years ago when the malignant smooth muscle tumors of the uterus were studied. Evans reviewed the follow-ups on these patients and correlated them with the number of mitoses in the tumor. If there were two or more mitoses in every high power field, they were invariably malignant. If there were practically no mitoses, no matter how bizarre the growth looked, they did not behave as malignant tumors. Of course, there is an intervening zone between those two extremes in which one is uncertain as to whether or not they are malignant. In this case there are hardly any mitoses so I would anticipate that this will behave like a benign growth and that the excision has been wide enough to get around it and I think this woman will be cured.

I might say that the palisading of nuclei

which was brought out by Dr. Halpert can be observed in smooth muscle not only in neoplasms but also, for instance, in an obliterated appendix. Arrangement of the smooth muscle then gets sometimes an alignment of the nuclei which gives a good imitation of palisading that is characteristic of the nerve sheath cell tumors. I think that is the thing which originally led people astray on so many of these growths. I was led astray myself after reading the French monograph, and published three cases of what I thought at the time was Schwann cell tumor. Later on I had publicly to acknowledge my mistake.

This woman has a history of bleeding in a small way from the stomach for ten years. The interesting thing to speculate on is whether she has had the tumor all that time and whether it could have been responsible for the bleeding or whether she had a gastric or duodenal ulcer that had healed in the meantime. I think it is quite possible that the bleeding came from this tumor even though there was little erosion of the mucous membrane. There are one or two tiny spots of superficial erosion but we can not tell how long they were there.

DOCTOR HALPERT: I appreciate Doctor Stout's remarks. Doctor Fulton and I were about to publish this growth as a neurofibroma. Since this growth looks so different from a leiomyoma and it so closely in places imitates a neurofibroma, I wonder if this is a combination where both elements might be present. Is there enough evidence to exclude that possibility?

DOCTOR STOUT: The leiomyomas of the alimentary tract are somewhat different from those found in the uterus but the smooth muscle cells have intracellular fibrils and the Schwann cells of neurofibromas do not. Although in other respects they resemble one another this serves to differentiate between them. I am not acquainted with any tumors composed of admixture of smooth muscle and nervous elements and without definite proof I would hesitate even to suggest such an admixture.

2. FIBROMA OF STOMACH

JOHN H. CLYMER, M.D.: O. V., a 17-year-old Negro girl, was admitted March 11, 1947, complaining of a mass in the abdomen and shortness of breath on exertion. When first seen in the Out-patient Department, February 27, 1947, a large, smooth, non-tender mass was palpable in the upper abdomen. Roentgenograms of the chest were negative, those of the abdomen disclosed

that the mass displaced the transverse colon downward and the stomach upward and anteriorly. Intravenous urograms revealed some distortion of the lower calyx of the left kidney attributed to pressure from the mass. Pelvic examination revealed slight enlargement of the cervix uteri, a small erosion of the os and a moderate mucoid discharge. The mass seemed not to be connected with either the uterus or the adnexa.

At the time of admission, physical examination yielded no additional information. Examination of the blood and urinalysis gave negative results except for a one to two plus albumin. On cystoscopic examination there was some injection of the bladder mucosa.

Laparotomy (by Dr. Forrest M. Lingenfelter) on March 28, 1947, disclosed a smooth, firm, well-circumscribed neoplastic mass about 20 cm. in diameter attached to the greater curvature of the stomach and to a portion of the transverse colon and situated apparently within the omental bursa. The mass was removed together with a portion of the stomach and a segment of the transverse colon. The opening in the stomach was repaired, and the severed portions of the transverse colon were sutured to the abdominal wall to form a "double barrell" colostomy. A jejunostomy was made at a point 12 cm. from the duodenojejunal junction. The patient recovered slowly. The jejunal tube was removed on the 14th day. The opening closed spontaneously a few days later. The colostomy was functioning well when the patient was discharged May 2. She was re-admitted June 28, and on July 17, the colostomy was closed. The patient had an uneventful recovery and was discharged July 30. She was last seen March 6, 1948, at which time she had gained about 25 pounds and was asymptomatic except for a sense of fullness before finishing meals. Roentgenograms disclosed some narrowing of the transverse colon near the splenic flexure with no hindrance to the passage of content. There was some gastric residuum three hours after a barium meal.

DOCTOR RUSSO: Roentgenograms of the chest were negative; those of the abdomen disclosed that the mass displaced the transverse colon downward and the stomach upward anteriorly. Intravenous urograms revealed some distortion of the lower calyx of the left kidney attributed to pressure from the mass. We thought of a cyst of the mesentery or of a pancreatic cyst.

FORREST M. LINGENFELTER, M.D.: The tu-

mor came on gradually. It was movable with respiration. It was non-tender. No history of trauma was ascertained. The colon was displaced downward and we thought of some slow-growing tumor in connection with the stomach.

DOCTOR STOUT: What was the relationship to the omentum?

DOCTOR LINGENFELTER: We removed a portion of the greater curvature and the tumor seemed to extend down to the greater omentum. In order to remove it, we had to take off a portion of the stomach and a portion of the transverse colon.

DOCTOR STOUT: It was not in the gastrocolic omentum?

DOCTOR LINGENFELTER: No, it was adherent to it.

DOCTOR STOUT: Was it between the leaves?

DOCTOR LINGENFELTER: No.

DOCTOR HALPERT: I would like to ask Doctor Russo whether it can be said from the films that this mass was solid or contained fluid?

DOCTOR RUSSO: No, we can not say from the x-ray findings.

DOCTOR HALPERT: The growth weighed 4,350 grams, it was globular with a smooth external surface. On the cut surfaces it had an interlacing pattern with coarse or more delicate fibrils. There was no sub-division into lobules.

Microscopically the mucosa of the stomach was intact with only a few of the surface epithelial cells missing, and good preservation of the cells lining the glands. The muscularis mucosae was clearly discernible, also the submucosa. External to the muscle layer was the neoplastic tissue. The neoplasm, as one would expect from the gross appearance, was composed of a fibrillar ground substance in which there were elongated cell nuclei within a scanty cytoplasm fading into the fibrils. The nuclei were arranged in streams and whorls. Here and there were blood vessels. Nowhere were there any areas of hemorrhage or necrosis. There was no conspicuous presence of cells in a state of division. The interlacing pattern was more marked in some fields than in others. The connective tissue which made up the growth seemed to be more mature in some areas than in others. In places it was almost embryonal connective tissue, in others collagenous bundles were seen in the beginning of their formation. This is a fibroma.

DISCUSSION

DOCTOR STOUT: This is the first time I have

seen a large fibroma attached to the stomach. I believe it must be a very rare event. Do you know, Doctor Halpert?

DOCTOR HALPERT: One hundred twenty-five cases of fibroma of the stomach have been reported. Some 96 were tabulated not long ago. The others were individual reports. They varied in size from a few centimeters to 20 or more. The largest one was 5½ kilograms. This is believed to be the second largest one. The third was 3 kilograms.

DOCTOR STOUT: I wager that a lot of them were not fibromas.

I quite agree with the interpretation given and think that this is a fibrous growth and that it is benign in all respects with perhaps one exception. Fibrous growths of this size are apt to be infiltrative even though one can not prove it microscopically.

When I studied the follow-ups on cases of well differentiated fibrous tumors in different parts of the body, there was a recurrence rate of over 60 per cent. Of course, most of those were in the soft tissues and the tendency is, when a surgeon undertakes to excise a mass in the soft tissues that he believes is probably not a malignant tumor, to excise it with due respect for surrounding muscles, nerves and blood vessels and with the greater thought to the preservation of function than to elimination of the tumor. By coming close to the margin of the growth in about 60 per cent of the cases treated at Presbyterian Hospital there was recurrence. In this case there may be a better chance for cure because all of the parts to which the growth was adherent were removed. In other parts it was outlined by the peritoneum. If the peritoneum surrounds the tumor, one can rely on that being a bar to the growth of the tumor at that point. If the growth is going to invade surrounding tissues through the peritoneum, the peritoneum first becomes adherent. That is not true, of course, in the soft tissue. There is no structure there like the peritoneum that can give an idea as to whether the tumor is limited. So I have used the term well-differentiated fibrosarcoma, perfectly well realizing that the tumor will not metastasize. I do not think a tumor like this will metastasize; therefore, one is quite justified in calling it a fibroma. I call it a fibrosarcoma because I am interested in seeing tumors of this sort better treated.

In the past the approach to most soft tissue tumors has been generally wrong. It has been to wade right in and try to cut

the mass out without finding out first what it is. That has largely been responsible for the high recurrence rate and to the high death rate, from sarcomas of the soft parts. I believe that a biopsy should be taken first to find out what the growth is. Then, with that knowledge, undertake the kind of operation which experience has proved to be the best in similar cases. I have been impressed with the large amounts of muscle that can be removed in the lower extremity and the upper extremity too without unduly crippling the individual. No prosthesis for the lower extremity is equal to the patient's own extremity even though it may be greatly weakened by removal of all of the muscular tissue on the anterior surface of the thigh. I have seen that done and the lateral muscles brought together in front. Several such cases are walking around today with only a somewhat weakened leg. I am sure that all of those who have had an opportunity to observe prostheses know that no artificial knee joint is equal to one's own knee. It is the high amputations where the knee joint has to be sacrificed that give the great defect afterwards in locomotion.

The chances are excellent that a cure has been effected in this case but it is conceivable that there may yet be local recurrence because these growths are not quite as simple as the term fibroma would lead one to expect. That is my only objection to the term, it lulls you to sleep.

DOCTOR HALPERT: There may not be any question about the microscopic structure of this growth. There might be some hesitancy to believe that this arose from the stomach. It just happened that a similar case with a smaller growth was reported from Ghon's Institute where examinations were thorough; I respect the authority of Ghon, and I felt this was an exact duplicate of that case.

CLIFFORD C. FULTON, M.D.: When the surgeon opens the abdomen and finds a tumor of the stomach, the chances that it is a benign tumor are relatively small. About 98 per cent of tumors of the stomach are said to be malignant. Is that figure too high?

DOCTOR STOUT: I do not know the exact percentage. Perhaps it is too high if you take all of the benign growths. There are a few adenomatous polyps and by chance sporadic cases like this turn up. Probably 90 per cent are malignant. Perhaps I should modify that. There was a report by Dr. Meissner, an associate of Dr. Shields War-

ren, on a series of resected stomachs in which he looked for smooth muscle tumors. He could find them in 60 per cent of the cases. Most of them were minute. Doctor Meissner is a careful observer and deserves respect. My eyes are not as sharp as his and I do not have innumerable sections of the stomach made.

3. FIBROSARCOMA OF HELIX OF RIGHT EAR

VICTOR C. HACKNEY, M.D.: A. B., a 92-year-old white man, was admitted September 1, 1948. He stated that two months previously, following trauma, a small, non-tender mass appeared on the superior surface of the auricle of the right ear. The mass gradually enlarged. About two weeks before admission, a small portion of skin over the growth became ulcerated. Examination revealed a mass 2.5 cm. in diameter, covered by a yellow brown crust, and elevated 2 cm. above the skin surface of the helix of the right ear. The growth was not movable over the underlying cartilage. The regional lymph nodes were not palpably enlarged. Resection (by Dr. John H. Clymer) of the upper third of the auricle of the right ear was performed on September 7, 1948. The operative wound was well healed when the patient was last seen March 11, 1949.

DOCTOR HALPERT: The resected portion of the auricle appeared as stated. On the cut surfaces there was an interlacing whorllike pattern (Fig. 3). Microscopically the cells were spindle shaped, cut longitudinally, across or obliquely giving a whorllike pattern. In places there was marked variation in the size of the nuclei, some with giant proportions and with some in varying stages of cell division. The surface epithelium thinned and the neoplasm came up quite close, sometimes destroying it, the surface becoming ulcerated and the growth exposed. We thought this was a malignant connective tissue tumor, a fibrosarcoma.

DISCUSSION

DOCTOR STOUT: The diagnosis which would have occurred to me first, from the clinical aspect, would have been a malignant melanoma, but, of course, it is not that. As soon as one cuts into it, there appears the same pattern as we saw in that tumor of the stomach, only there are not as many connective tissue fibers between the cells. I agree with Dr. Halpert's diagnosis.

Fibrosarcomas are very interesting tumors because they have gotten an unde-

servedly bad name. If a fibrosarcoma starts in the skin, I do not know of any proved record in which the tumor metastasized. It is difficult to be certain that one of these tumors starts in the skin because when seen for the first time it may and often does involve the subcutaneous tissues. One has to exclude cicatrices too because some of the fibrosarcomas which have arisen in them have been malignant and metastasized. The majority of these tumors get into dermatologic clinics when they arise in the skin, so the dermatologist gets first chance in giving them names. We have inherited some of these names. Two better known ones are first dermatofibrosarcoma protuberans, which may become quite large, and is multinodular. The skin over this variety is characteristically quite red. This is characteristic of them. It is not the redness due to impending ulceration because it remains sometimes for years. A second variety, instead of being multinodular is a single nodule. A Frenchman, Darier, who first described it called it progressive recurring fibroma of the skin. I tracked down one or two cases reported as having metastasized but the evidence was not convincing.

It is particularly the deeper fibrosarcomas that are occasionally truly malignant metastasizing tumors. Fibrosarcoma has got an undeservedly bad name because a lot of cases of other kinds of tumors have been called fibrosarcoma. There is a big variety of sarcomas; I know of 19 varieties of the soft parts, each with a distinctive behavior. Almost all of them are capable of forming fibrous elements. Seeing fibrous elements, one is apt to label it fibrosarcoma without paying attention to other elements of the growth. I think fibrosarcoma is the least malignant of all soft part sarcomas. When they develop in muscle, particularly in the muscles of the thigh, then one is likely to encounter the malignant, metastasizing form.

This present case is interesting because it shows a good deal of mitotic activity, one of the indications of malignancy. I do not suppose that this man's life expectancy is too great but he may turn up sometime with metastasis. However, I rather guess he will outlive the influences of his tumor and die of something else.

DOCTOR HALPERT: Have you ever seen a growth like this at the location in the helix of the ear?

DOCTOR STOUT: I do not recall any.

DOCTOR HALPERT: None has been reported in the literature in the past 10 years. One in a five-year old girl was reported in 1938 and two in the decade preceding 1938, one from Hungary and one from Italy.

HOWARD C. HOPPS, M.D.: If this diagnosis had been known at the time of the operation what treatment would you have recommended?

DOCTOR STOUT: Just exactly what was done. One should, of course, consider the patient. The whole ear could have been taken off. The operator seemingly got wide of it; so far, there is no evidence of recurrence.

ERNEST LACHMAN, M.D.: If this tumor were to metastasize would it metastasize by way of the lymph drainage or the blood stream?

DOCTOR STOUT: The majority of these, when they do metastasize, go through the blood stream. There are sufficient records to show that sometimes they go through the lymphatics. It is possible to have regional lymph node metastasis.

4. MAXILLARY TUMOR OF RETINAL ANLAGE

VICTOR C. HACKNEY, M.D.: D. R., a 6-months-old white girl was admitted March 1, 1946, with a firm mass protruding from the hard palate. When about four months old, she fell and struck the upper lip, over which a blue streak appeared. The next day the area became swollen and a physician incised the lip from the inside of the mouth and obtained bright red unclotted blood. This reduced the size of the lip temporarily.

On admission to the hospital the child was in apparent good general health. The upper lip was blue and somewhat swollen and distorted. A non-tender, firm mass, about 5 cm. in diameter, protruded into the mouth over the anterior portion of the right maxilla distorting the right side of the upper lip. The mass appeared to be attached to the bone. The overlying mucosa of the palate and gums was intact. Roentgenographic examination of the face disclosed a soft tissue tumor in the right maxillary region with displacement of the teeth. On March 8, the tumor was excised (by Dr. Reynold Patzer). The wound healed readily and she was discharged March 27. When last seen, November 14, 1946, there was no recurrence of the growth.

DOCTOR HALPERT: We had a letter that she is perfectly well and promised to

be here this morning but is not.

DOCTOR RUSSO: The x-ray showed an expanding type of lesion of the maxilla displacing the central incisors and lateral incisors outward and forward. We thought it could be a primary tumor of the maxilla.

DOCTOR HALPERT: The growth was 6 cm. in diameter. On the cut surfaces there was a smoky gray-brown appearance. There seemed to be a capsule which appeared to delimit the growth. In microscopic preparations there were slitlike spaces lined by cuboidal or columnar cells that contained brown granules. The surface of some of the spaces infolded here and there and imitated the pattern of the ciliary body of the eye. Elsewhere, there were naked cell nuclei that looked like nuclei of nerve cells or cells which are seen in the retina. The spaces lined by cells containing pigment were in a loose, almost embryonal, connective tissue stroma. We thought this was a tumor of retinal anlage.

DISCUSSION

DOCTOR STOUT: I certainly have never seen anything exactly like this in the maxilla before. There has been some discussion by the Armed Forces Institute of Pathology as to the exact nature of the growth. I do not think it will profit us too much to go into the pros and cons of it. I think Doctor Halpert's suggestion is a better one than the others that have been made, namely, that it is some kind of a pigmented neuroblastoma or a pigmented odontoma or a growth derived from odontoblastic tissue. I recently saw a growth which resembled this somewhat which started in an infant shortly after birth and was no doubt a congenital lesion on the soft parts of the head. It grew rapidly, down into the dura. It pushed into the dura but did not actually invade it. It also had these pigmented structures. It has been suggested by Doctor Clark of St. Luke's Hospital in New York that it was derived from a pigmented retinal anlage. Certainly they can occur in teratomas. I would guess that this will prove to be a non-metastasizing lesion. If it were a pigmented neuroblastoma it would not remain benign but would kill the child. The child has gone three years which would make it highly unlikely that the growth is a malignant, metastasizing tumor. It is a very bizarre growth and I doubt if any of us will ever see another in exactly this situation.

5. LIPOSARCOMA OF NECK

✓ HAL A. BURNETT, M.D.: J. J., 69-year-old

white man, was first seen in this hospital in September, 1943. He stated that about 24 years ago he noted a small tumor on the nape of his neck. It continued to enlarge until 1935, when it was removed surgically. Since that time there have been numerous recurrences and excisions. By 1943, he had had five operations for the removal of "lumps" from the back of the neck. The microscopic diagnosis of these was lipofibrosarcoma. Since then he has returned on 12 occasions for excisions of recurrent tumors of the neck. In June, 1948, extirpation of the entire posterior surface of the neck was performed and a dermatome graft was substituted. Tumors, however, recurred and he has been admitted for excision once since that time (by Dr. Hal A. Burnett). There is no demonstrable evidence of distant metastasis.

DOCTOR HALPERT: We have had aggregates of tissue which would weigh several pounds. Here are the nodules removed last. They are apparently nodular masses with a capsule. They are soft and on the cut surfaces have a streaked appearance with a yellow hue. It is not like adipose tissue and it is not like connective tissue but something between the two. Some of the nodules have more of the yellow and some of them more of the streaked and white hue.

Microscopically, as would be expected, the cells, lipoblasts, were neoplastic adipose tissue cells. They differ from the adipose tissue and from the benign form of growth in that some of the cells have a faint cytoplasm; the nuclei pushed to the side giving the cell a signet ring appearance, were larger and deeper stained. Even the cell membranes appeared deeper stained. Then in some fields the stroma or septa between the lobules of adipose tissue cells had an interlacing pattern which explains the gross appearance. Where there was more of the connective tissue present there was more of the gray-streaked pattern; where more of the lipoblasts or adipose tissue cells were present, there was more yellow appearance. Toward the striated muscle it seemed to delimit itself with a pseudocapsule, pushing the tissue aside. Here and there it infiltrated between the muscle bundles, not just compressing them, but apparently replacing them. This is a liposarcoma or malignant lipoblastoma.

DOCTOR DODSON: A course of x-ray therapy given had no apparent response.

DISCUSSION

DOCTOR STOUT: The subject of proper treatment of fatty tumors is an extremely interesting one. The tumors are tremendously variable in the way they behave and in their clinical course. This is a very unusual variant. The largest and heaviest tumor ever grown was a lipoma estimated to weigh 275 pounds in a patient weighing 90 pounds and reported in 1857 in the *Cleveland Clinical Gazette*. I do not know how trustworthy the histologic features of it are, but I think it is a very fascinating story. It was retroperitoneal; that is the place where the biggest of these tumors develop. It came out of the pelvis and involved one of the labia majora and made a mass seven feet in circumference between the patient's legs. She lived for eleven years with that tumor. She had adapted herself so well that after some little embarrassment with respiration she got along perfectly well, and had normal elimination. She became pregnant when her tumor weighed 175 pounds, but did not produce a living child.

To get back to the fatty malignant tumor, when one encounters a large tumor, either in the retroperitoneum, in the thigh, or popliteal space, the chances are good that it may be a liposarcoma. The heaviest liposarcoma I know of weighed 69 pounds. They are made up of embryonal adipose tissue and vary tremendously in histologic appearance. There are two kinds of adipose tissue in the body, ordinary adipose tissue and brown adipose tissue. Some tumors imitate the embryonal adipose tissue of the ordinary type; a few of them imitate the appearance of brown adipose tissue made up almost entirely of masses of rounded cells instead of spindle-shaped cells. In this tumor they are approaching the rounded cells, because they are maturing and getting large fat vacuoles in them. But most of the cells have not quite reached the adult form. This is extremely interesting because of the way it occurred. It made a very large tumor and these recurrent masses seemingly grow rather slowly. The tumor has not metastasized but remained a localized growth. There have been a few other tumors that somewhat resembled this; one or two of them developed in the pararenal region which is a favorite spot for the development of these tumors. The subsequent course led to the formation of multiple nodules very much like this scattered over the surface of the peritoneum. In spite of this the patient lived for many years. This patient

will probably outlive this tumor. From time to time these nodules can be removed as they appear. I do not think it would pay to do anything radical to this man. This case confirms the high recurrence rate I mentioned before in relation to fibrosarcomas. It is also very high for liposarcomas for the same reason. Usually the tumor has infiltrated beyond where one can palpate it or see it with the microscope. Here the tumor nodules seem quite well circumscribed. Yet it has been demonstrated that, even after removal and extensive skin graft, tumor masses are still growing.

In regard to liposarcomas and radiotherapy, they are reported to be somewhat radiosensitive. I know of two recurrent nodules that reached the size of 4 cm. in diameter that were treated by tremendous doses of x-ray; one case, by x-ray only; the other case, by x-ray followed by radium implantation which apparently destroyed the recurrent nodule completely. I know of no case with a large tumor that was dealt with successfully by irradiation; a few of them have decreased in size. I think it is a pure waste of time to irradiate huge tumors since it is impossible to deliver a big enough dose to all parts without producing damage so great that it might kill the patient.

Since this man goes on forming local nodules which do not do him a great deal of harm I would not think it would pay to try to deliver huge doses of irradiation to the nodules if it damages him in so doing. He seems not to mind the nodules. The tumor is fairly well differentiated. The differentiated varieties seldom metastasize but they do recur and recur.

DOCTOR HOPPS: Is there a possibility of multicentric origin?

DOCTOR STOUT: It is perfectly possible, but when they occur around the same site I hesitate to accept that. The tumor is notorious for the way it can insiduously infiltrate, and I would guess that is the more probable way of spread.

6. PAGET'S DISEASE OF THE NIPPLE

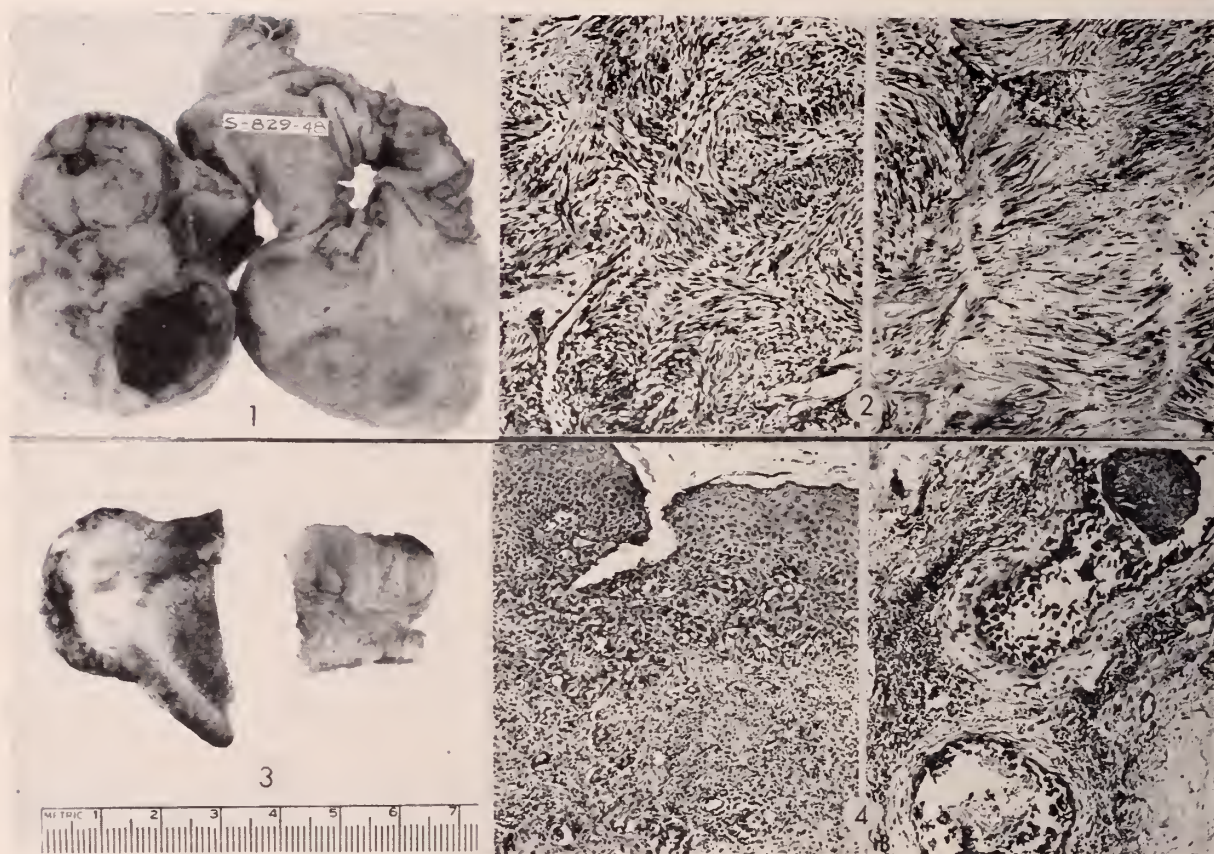
JOHN H. CLYMER, M.D.: B. P., a 32-year-old white woman, noticed intermittent "rash" involving the nipple and areola of the left breast, seven years ago during the last half of her second pregnancy. The lesion had a clear watery discharge; it frequently crusted with healing over of the skin. After some weeks the weeping would reoccur. This continued intermittently for two years. For the past five years she has had a crusting lesion over the left nipple

which has spread to the areola and to the adjacent skin. She has had two pregnancies during this time; one child is three years, the other is one year old. She nursed neither of these children because of the ulcerated nipple.

At the time of admission, February 24, 1949, the temperature, pulse rate, respirations and blood pressure were within normal limits. The mammary glands were pendulous and at the same level. The nipple of the right was retracted. The left nipple and areola were replaced by red-gray granulation tissue with irregular contour, slightly raised above the surface of the adjacent skin and with well-defined edges. The lesion was partially covered by a hard crust and the underlying tissue bled freely when the crust was removed. In the mammary gland proper, beneath the skin lesion, superiorly and slightly to the right of the nipple, a firm, indefinite, thickened area, approximately 5 cm. in diameter, was felt. The films of the chest, dorsal and lumbar spine and bony pelvis were all negative for metastasis.

On biopsy of the ulcerated areola on February 29, a diagnosis of carcinoma was returned. On March 3, a radical mastectomy was performed (by Dr. Harrell C. Dodson, Jr.). Post-operative course has been uneventful except for delayed wound healing.

DOCTOR HALPERT: The biopsy specimen was adequate to establish the diagnosis. Fragments of skin, covered by thickened epithelium with neoplastic cells, were seen invading the subjacent tissue (Fig. 4A). The region of the nipple was identified by smooth muscle bundles. The neoplastic cells in the deeper layers of the epithelium and separately were seen to invade the subjacent tissue. There was a dense, hyalinizing fibrous connective tissue surrounding some of the ducts. That may have given the firm feel on palpation. The lumen of the duct was full of neoplastic cells (Fig. 4B). Some were shed or dead and filled the lumen. These were neoplastic cells apparently still in situ which had large, vesicular, deeply stained nuclei, some in the state of division. There was a dense infiltration surrounding these tubules with lymphocytes, some plasma cells and large mononuclear cells. We believe that this is a carcinoma which apparently arose in the ducts and caused the ulceration on the surface. The regional lymph nodes were thoroughly examined, but none of them showed any neoplastic involvement.



EXPLANATION OF FIGURES

Fig. 1—Neurofibroma (?) of stomach in a 58-year-old white woman. The growth is enclosed within the gastric wall. On the cut surfaces it has a convoluted appearance with streaks of interlacing fibers. The cavity contained a necrotic debris and extravasated blood.—Reduced to about one half original size.

Fig. 2—Microscopic appearance of the growth shown in Fig. 1.—In a delicate fibrillar ground substance there are elongated cell nuclei in streams and whorls (A). The cells are in a

palisading pattern (B). x 80.

Fig. 3—Fibrosarcoma of helix of right ear in a 92-year-old white man. The gross appearance of the resected portion of the helix is seen. There is a streaked appearance of the cut surface.

Fig. 4—Paget's disease of the nipple in a 32-year-old white woman. Neoplastic cells are seen invading the subjacent tissues (A). The lumina of ducts contain neoplastic cells (B). x 120.

DISCUSSION

DOCTOR STOUT: There are a number of very interesting features in this case. In the first place, it is a very good example of Paget's disease which in my experience is always a carcinoma of the breast. Of course, there are eczematoid lesions of the nipple that can simulate the clinical appearance of Paget's disease. All of the cases that show what Dr. Halpert has just demonstrated are carcinomas of the breast. When one encounters a nipple in which there is an eczematous process and examination reveals no clinical evidence of carcinoma of the breast the proper procedure is to take a biopsy. Paget's disease carcinoma is easily recognized microscopically. If you prove you are dealing with Paget's disease, the proper treatment is radical mastectomy. In this instance the only deeper tumor found by Doctor Halpert was in the ducts. That may be the only area of involvement or it

may be that she had a tiny microscopic involvement some place else. One can not say with certainty that there was no cancer elsewhere. We know there was cancer in the nipple, ducts, and in the skin.

Another aspect in this case is that she has passed through two pregnancies since the initial appearance of the lesion. Apparently they have not had any effect on the cancer. She has had the cancer apparently for seven years and it still is a superficial affair and, hopefully, she is cured. I would not guarantee her cure. Cancer is cancer and even though it seems to be altogether confined to the ducts and the epidermis, we know from bitter experience that some places it may have transgressed the basement membrane and extended out into the adjacent tissue where there are lymphatics. Even though no metastases were demonstrated in the axilla, that does not give a complete guarantee that there is no metastasis.

I would say, however, that her prognosis ought to be good.

Then there is the question of the relationship of breast cancer developing during pregnancy and lactation to curability. Haagensen and I made a rather elaborate inquiry whether, when certain kinds of advanced cancer were present, it was worthwhile doing any radical operation. We arrived at the conclusion that those cases in which radical mastectomy had been done and no cures had been obtained operation had no curative value at all. Moreover, we found statistically that when radical operation had been done on these inoperable cases, actually it had shortened life. It would have been better to leave her alone or treat her by intensive irradiation. Dr. M. Lenz who was associated with us at the Presbyterian Hospital for many years has succeeded in giving very large doses of radiation to some of these advanced cases. Whereas before they had all died before the five years expired, now some 10 women so treated have survived for five to ten years in a clinically arrested state. I do not want to get into the question of radiotherapy because there are so many aspects, but I think that the inoperable breast cases should be treated by radiotherapy, or not treated at all. If there is a terrible ulcerated mass, for the sake of the patient's comfort, a simple mastectomy could be done to get rid of that. Simple mastectomy does not seem to have any effect upon longevity whereas radical mastectomy shortens life in inoperable cases.

One of the things we investigated was the development of cancer of the breast during pregnancy or lactation. In our cases no woman who developed cancer during pregnancy or lactation and was treated by radical mastectomy was cured. Since the publication of that article, there have been brought to our attention sporadic cases here and there, apparent cures or long time arrests of cancer of the breast developing during pregnancy or lactation treated by radical mastectomy. So we have modified our ideas about it to this extent: if the cancer develops during pregnancy and lactation and it does not have any of the other signs of advanced carcinoma, the patient had better be given the benefit of the doubt and treated by radical mastectomy. Since that time, such cases have been so treated at the Presbyterian Hospital but always with no good results. I think in this case radical mastectomy was in order but I am still

dubious about her hope of cure. Time alone will tell.

Also, the question arises in Paget's disease of how long the cancer has been present in the duct of the nipple before it manifested itself on the surface as a Paget's cancer. It may be in this case the cancer actually started before this second pregnancy but from what you say, the first sign was discovered during her second pregnancy.

QUESTION: Are there any disadvantages of taking a biopsy and waiting two or three days before the operation?

DOCTOR STOUT: Statistically, there is no harm. That is as close as I can come to telling you. We investigated that particular point when in the past for one reason or another a biopsy was taken of a tumor and some 24 hours to two weeks elapsed before the radical mastectomy was completed. If you compare that group with all cases of cancer of the breast treated by radical mastectomy the results are better but I think that can easily be explained because the cancers that are mistaken for benign tumors or considered doubtful and are biopsied or locally excised are generally early, favorable cases. Therefore, we compared them with only the group of favorable cases treated by frozen section, followed by immediate radical mastectomy. There was no difference in the cure rate so we feel that it is not desirable but not, on the other hand, a dangerous thing to biopsy ahead of time.

DOCTOR FULTON: Do you expect a different outcome if the breast cancer started during pregnancy than if it had already been present and the pregnancy followed?

DOCTOR STOUT: It makes a very great difference indeed in curability whether the carcinoma actually started during pregnancy and lactation or whether it started in the period between pregnancies or before pregnancy. We have frequently seen patients who have had radical operations for cancer of the breast go through one, two or three pregnancies and have it do the patient no harm. If the radical mastectomy has succeeded in taking all of the cancer cells out of that patient I do not see how a pregnancy could do any harm. If it has not succeeded, the worst you might expect from a pregnancy is that it might possibly accelerate the growth of cancer cells but it probably would not influence the eventual outcome. The only thing it might do, in my opinion, would be to speed it up and it would not be sure to do that.

DOCTOR FULTON: I mean do you consider a patient who has a carcinoma today and several months from now a pregnancy ensues, is the situation the same as if she had a pregnancy and then the evidence of carcinoma appeared?

DOCTOR STOUT: No, I do not think so. In the cases in our series who were cured, where that happened, the cancer antedated the pregnancy by a short period of time.

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CASE VI

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MEET OUR CONTRIBUTORS

Donald V. Crane, M.D., Tulsa, is the author of "The Management of Your Patients With Eye Problems" in this Journal. He was graduated from the University of Buffalo in 1937 and limits his practice to his specialty, ophthalmology. He is a member of the American Academy of Ophthalmology, the James A. Gibson Anatomical Society, and Alpha Omega Alpha. He has been certified by the Board of Ophthalmology. Dr. Crane is alternate delegate from Tulsa county.

C. B. Dawson, M.D., B.S., Oklahoma City, wrote "The Management of Anuria" in the Journal. Dr. Dawson was graduated from the University of Oklahoma School of Medicine in 1943 and limits his practice to his specialty, urology. Dr. Dawson was in the United States Navy from 1944 to 1946 and served a residency in urology at the University of Oklahoma hospitals from 1946 to 1948.

Fred D. Switzer, M.D., Hugo, is the author of "Congenital Anomalies of the Eyes" in the September Journal. Dr. Switzer was graduated from the University of Oklahoma School of Medicine and is a member of Phi Chi medical fraternity. He has been secretary of the Tri-County Medical Society.

Charles D. Blossingame, M.D., Ph.B., F.A.C.S., Memphis, Tenn., a guest speaker at the May, 1949 Annual Meeting, has a paper on "Technical Procedures in the Management of Diseases Involving the Sinuses" appearing in this issue of the Journal. A graduate of Vanderbilt University he limits his practice to his specialty, otolaryngology. He is a fellow of the American Academy of Ophthalmology and Otolaryngology, a fellow of the American Laryngological Association, and others. He is a member of the American Board of Otolaryngology and a representative to the Board of Governors of the American College of Surgeons.

MEDICAL SOCIETIES AROUND THE STATE

(Because many of the County Medical Societies do not hold meetings during the summer months, very little news was available for this column but it is hoped it

can be resumed in October with news each month from each county society secretary.)

KIOWA-WASHITA

Members of the Kiowa-Washita Medical Society and Auxiliary met recently for a dinner and separate business and scientific meetings afterward. C. P. Bondurant, M.D., Oklahoma City, showed a film on cancer at the scientific meeting.

CARTER COUNTY

Carter County Medical Society approved an extension of the activities of the blood bank at its meeting

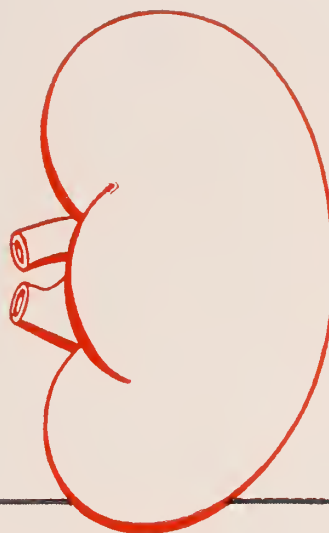
recently and announced services of the bank would be available to all physicians in that area. Those named to the blood bank committee were C. A. Johnson, M.D., Thornton Kell, M.D. and J. M. Gordon, M.D.

POTTAWATOMIE COUNTY

E. E. Rice, M.D. was in charge of the program when "Diaphragmatic Hernia" was the topic at the Pottawatomie County Medical Society meeting July 20. C. W. Haygood, M.D. led the discussion.

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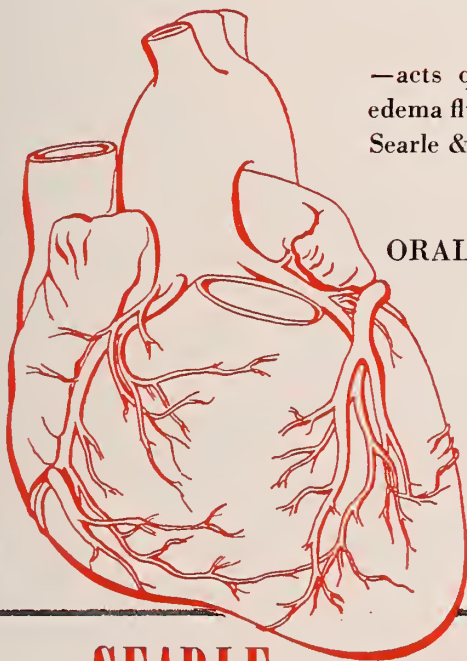
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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

1. Brown, W. E., and Bradbury, J. T.: The Effectiveness of Various Diuretic Agents in Causing Sodium Excretion in Pregnant Women, *Am. J. Obst. & Gynec.* 56:1 (July) 1948.

President's Page

Most of us are familiar enough now with the name and activities of Oscar Ewing, but what do we know about his subordinates. "American Medicine and the Political Scene" tells us in the June 16 issue Vol. III, No. 24, "Representative Frank B. Keefe delivered an important speech in the House on June 2. The subject was, *Are We Headed Toward a Socialist Economy?* Keefe brought out a great deal of information about J. Donald Kingsley, who is Oscar Ewing's right hand man".

Witness these paragraph headings appearing in the same issue of the above mentioned publication:

"Kingsley Collaborated in 1942 with Notorious Members of Communist-Front Organizations".

"Free Capitalism has Outlived Usefulness, According to Kingsley. All Hail Socialism!"

"1942 Collaborators of Kingsley included Two Communists, McWilliams and Fraina, alias Corey".

Additional information is available concerning individual members of various groups in which Mr. Ewing is interested and which are playing a well directed role — such as the Committee for the Nation's Health, The Physicians Forum Lobby, The National Health Assembly. Dr. E. P. Boas, Dr. Frothingham and others, as appeared in "American Medicine and the Political Scene" Vol. III, No. 25, June 23, 1949 are:

Louis Adamic*
Will W. Alexander (x)
William Rose Benet*
Mary McLeod Bethune*
Ernst P. Boas, M.D.*
James B. Carey*
Morris Llewelyn Cooke*
Michael M. Davis*
James A. Dombrowski
Edwin R. Embree*
Clark Foreman
Langston Hughes**
Max Lerner*

Francis J. McConnell* (x)
Carey McWilliams** (x)
James G. Patton*
Martin Popper*
Emil Rieve*
Paul Robeson
Morris S. Rosenthal*
George Soule*
J. Raymond Walsh
A. F. Whitney
Aubrey Williams
Orson Welles*

Too long have we talked among ourselves and to ourselves. Let us now go to the public with this information which is vital, because the attempt to dominate Medicine is only the beginning of a catastrophic change in our entire life and economy as a nation.

Eternal Vigilance is the Price of Liberty.—(Jefferson)

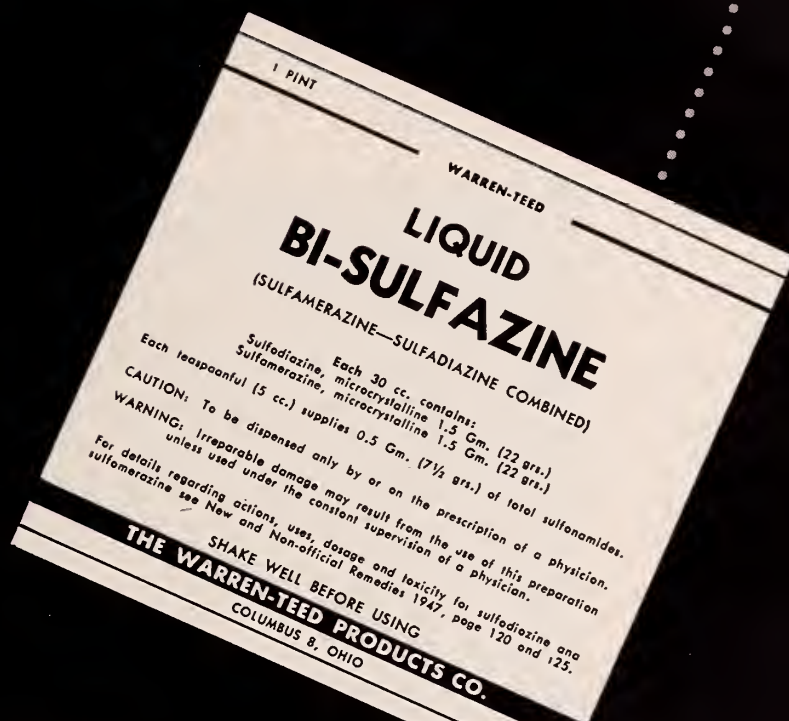
*Member of Committee for Nation's Health.

**Communist, according to House Un-American Activities Committee.

(x) Associated with Donald Kingsley.

George H. Garrison
President.

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PUBLIC RELATIONS REPORTER

DON'T BE MISLED

Don't be misled by the recent set-back of the proposed compulsory health insurance program. As this issue of the Journal goes to press, there is every indication that the issue will not be revived during the present session of Congress. There also is strong indication that the proponents of the welfare state are marshalling their forces for an even more vehement attack on the medical profession.

Now is the time to evaluate the A.M.A.'s National Education Campaign in terms of your loyalty. Is your County Medical Society putting its full weight behind the program? Are the individual physicians and their wives in your locality educating the people with whom they come in contact?

EISENHOWER SPEAKS

Speaking against legislation which would make Federal money available to help public schools in all states, former General of the Army Dwight D. Eisenhower, president of Columbia University, recently said, "The army of persons who urge greater centralization of Government authority are really more dangerous to our form of Government than any external threat that can possibly be arrayed against us.

"Unless we are careful," he added, "even the great and necessary educational proces-

ses in our country will become yet another vehicle by which the believers in paternalism, if not outright socialism, will gain still additional power for the central Government."

BRITISH INCOME TAXES

England's socialized Labor government, including National Health Insurance similar to the proposed compulsory health insurance plan for the U.S., costs the English taxpayer dearly. Here are comparative figures that show what this country could expect if we go overboard for the welfare state philosophy:

A married Britisher with two children pays \$88 in national tax on \$2,000 of earned income. A similarly situated American pays only \$20 for old age insurance.

On a \$4,000 income this Englishman would pay \$728 compared to the American's \$296, including \$30 for Social Security. The \$10,000 income man there pays \$3,260 while the American pays \$1,391.

Nor are income taxes the whole story. A package of cigarettes costing about 21 cents in the U.S., including state tax, costs the Englishman 70 cents. He pays a purchase tax up to 25 per cent on clothing and 100 per cent on luxuries. Our top luxury tax is 20 per cent.

PUBLIC RELATIONS CHECK LIST

Here is a public relations check list for County Medical Societies. Can you answer each question "Yes"?

1. Has your County Society appointed a Public Policy Committee?
2. Has its membership been reported to the State Association?
3. Have you passed a resolution against compulsory health insurance, sending copies to President Truman, the Oklahoma Congressional delegation, and the State Association?
4. Has your Society worked to secure similar resolutions from civic clubs, women's clubs, and other groups in your community?
5. Has your Society trained several members to speak before lay groups on compulsory health insurance?
6. Have you requested organizations in your community to set aside one meeting for a speaker on compulsory health insurance?
7. Are you working closely with your Women's Auxiliary in this campaign?
8. Are you making effective use of all the literature available to you?

30-DAY TEST REVEALED

*“Not one single case of
throat irritation due to
smoking CAMELS!”*



Yes, that's what throat specialists reported after making weekly examinations of the throats of hundreds of men and women from coast to coast who smoked Camels, and only Camels, for 30 consecutive days.



R. J. Rejnolds
Tobacco Co.,
Winston-Salem,
N. C.

According to a Nationwide survey:

*More Doctors Smoke CAMELS
than any other cigarette*

Doctors smoke for pleasure, too! When three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camel!

PRINCIPLES OF MEDICAL ETHICS RESTATED AND REVISED

Since raising the moral standards of the medical profession is one of the fundamental aims of the American Medical Association, members of the Oklahoma State Medical Association are urged to become familiar with the restatement and revision of the Principles of Medical Ethics as approved by the House of Delegates at Atlantic City in June.

Almost unnoticed in the midst of the startling developments of the Atlantic City session was the presentation by the Judicial Council to the House of Delegates of a restatement and revision of the Principles of Medical Ethics. The statement was promptly adopted

by the House of Delegates.

Among the most significant changes in content and in manner of statement are those relating to groups and clinics, including contract practice, the section on educational information and the section on the purveyal of medical service.

For example, under Chapter I, is a section entitled "Educational Information Not Advertising." Under Chapter III, Article Six, is a section entitled "Contract Practice". This section is almost entirely revised. The entire Principles of Medical Ethics are printed below:

PRINCIPLES OF MEDICAL ETHICS

CHAPTER I

GENERAL PRINCIPLES

Character of the Physician

Section 1.—The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals. A physician should be "an upright man, instructed in the art of healing." He must keep himself pure in character and be diligent and conscientious in caring for the sick. As was said by Hippocrates, "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life."

THE PHYSICIAN'S RESPONSIBILITY

Sec. 2—"The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities of political strife, of sectarian dissensions. Disease and pain the sole conditions of its ministry, it is disquieted by no misgivings concerning the justice and honesty of its client's cause; but dispenses its peculiar benefits without stint or scruple, to men of every country, and party and rank, and religion, and to men of no religion at all."

GROUPS AND CLINICS

Sec. 3—The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual physicians, each of whom, whether employer, employee or partner, is subject to the principles of ethics herein elaborated, the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession.

ADVERTISING

Sec. 4—Solicitation of patients, directly or indirectly, by a physician, by groups of physicians or by institutions or organizations is unethical. This principle protects the public from the advertiser and salesman of medical care by establishing an easily discernible and generally recognized distinction between him and the ethical physician. Among unethical practices are included the not always obvious devices of furnishing or inspiring newspaper or magazine comments concerning cases in which the physician or group or institution has been, or is, concerned. Self laudations defy the traditions and lower the moral standard of the medical profession; they are an indication of good taste and are disapproved.

EDUCATIONAL INFORMATION NOT ADVERTISING

Sec. 5—Many people, literate and well educated, do not possess a special knowledge of medicine. Medical books and journals are not easily accessible or readily understandable.

The medical profession considers its ethical for a physician to meet the request of a component or constituent medical society to write, act or speak for general readers or audiences. The adaptability of medical material for presentation to the public may be perceived first by publishers, motion picture producers or radio officials.

These may offer to the physician opportunity to release to the public some article, exhibit or drawing. Refusal to release the material may be considered a refusal to perform a public service, yet compliance may bring the charge of self seeking or solicitation. In such circumstances, the physician should be guided by the decision of official agencies established through component and constituent medical organizations.

A physician who desires to know whether, ethically, he may engage in a project aimed at health education of the public should request the approval of the designated officer or committee of his county medical society.

The most worthy and effective advertisement possible, even for a young physician, especially among his brother physicians, is the establishment of a well merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of simple professional cards is approved in some localities but is disapproved in others. Disregard of local customs and offenses against recognized ideals are unethical.

The promise of radical cures or boasting of cures or of extraordinary skill or success is unethical.

An institution may use means, approved by the medical profession in its own locality, to inform the public of its address and the special class, if any, of patients accommodated.

PATENTS, COMMISSIONS, REBATES AND SECRET REMEDIES

Sec. 6—An ethical physician will not receive remuneration from patents on or the sale of surgical instruments, appliances and medicines, nor profit from a copyright on methods or procedures. The receipt of remuneration from patents or copyrights tempts the owners thereof to retard or inhibit research or to restrict the benefits derivable therefrom to patients, the public or the medical profession. The acceptance of re-

bates on prescriptions or appliances, or of commissions from attendants who aid in the care of patients is unethical. An ethical physician does not engage in barter or trade in the appliances, devices or remedies prescribed for patients, but limits the sources of his professional income to professional services rendered only in the amount of his fee specifically announced to his patient at the time the service is rendered or in the form of a subsequent statement, and he should not accept additional compensation secretly or openly, directly or indirectly, from any other source.

The prescription or dispensing by a physician of secret medicines or other secret remedial agents, of which he does not know the composition, or the manufacture or promotion of their use is unethical.

EVASION OF LEGAL RESTRICTIONS

Sec. 7.—An ethical physician will observe the laws regulating the practice of medicine and will not assist others to evade such laws.

CHAPTER II

DUTIES OF PHYSICIANS TO THEIR PATIENTS

Standards, Usefulness, Nonsectarianism

Section 1.—In order that a physician may best serve his patients, he is expected to exalt the standards of his profession and to extend its sphere of usefulness. To the same end, he should not base his practice on an exclusive dogma or a sectarian system, for "sects are implacable despots; to accept their thralldom is to take away all liberty from one's action and thought."* A sectarian or cultist as applied to medicine is one who alleges to follow or in his practice follows a dogma, tenet or principle based on the authority of its promulgator to the exclusion of demonstration and scientific experience. All voluntarily associated activities with cultists are unethical. A consultation with a cultist is a futile gesture if the cultist is assumed to have the same high grade of knowledge, training and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree in which it elevates the honor and dignity of those who are irregular in training and practice.

PATIENCE, DELICACY AND SECRECY

Sec. 2.—Patience and delicacy should characterize the physician. Confidences concerning individual or domestic life entrusted by patients to a physician and defects in the disposition or character of patients observed during medical attendance should never be revealed unless their revelation is required by the laws of the state. Sometimes, however, a physician must determine whether his duty to society requires him to employ knowledge, obtained through confidences entrusted to him as a physician, to protect a healthy person against a communicable disease to which he is about to be exposed. In such instance, the physician should act as he would desire another to act toward one of his own family in like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

PROGNOSIS

Sec. 3.—The physician should neither exaggerate nor minimize the gravity of a patient's condition. He should assure himself that the patient, his relatives or his responsible friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

THE PATIENT MUST NOT BE NEGLECTED

Sec. 4.—A physician is free to choose whom he will

serve. He should, however, respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, the physician should not neglect the patient, nor should he withdraw from the case without giving notice to the patient, his relatives, or his responsible friends sufficiently long in advance of his withdrawal to allow them to secure another medical attendant.

CHAPTER III

DUTIES OF PHYSICIAN TO EACH OTHER AND TO THE PROFESSION AT LARGE

ARTICLE I.—Duties to the Profession

UPHOLDING THE HONOR OF THE PROFESSION

Sec. 1.—A physician is expected to uphold the dignity and honor of his vocation.

MEMBERSHIP IN MEDICAL SOCIETIES

Sec. 2.—For the advancement of his profession, a physician should affiliate with medical societies and contribute of his time, energy and means so that these societies may represent the ideals of the profession.

SAFEGUARDING THE PROFESSION

Sec. 3.—Every physician should aid in safeguarding the profession against admission to it of those who are deficient in moral character or education.

Sec. 4.—A physician should expose, without fear or favor, incompetent or corrupt, dishonest or unethical conduct on the part of members of the profession. Questions of such conduct should be considered, first, before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations, provided such a course is possible and provided, also, that the law is not hampered thereby. If doubt should arise as to the legality of the physician's conduct, the situation under investigation may be placed before officers of the law, and the physician-investigators may take the necessary steps to enlist the interest of the proper authority.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER

Dependence of Physicians on Each Other

Section 1.—As a general rule, a physician should not attempt to treat members of his family or himself. Consequently, a physician should cheerfully and without recompense give his professional services to physicians or their dependents if they are in his vicinity.

COMPENSATION FOR EXPENSES

Sec. 2.—When a physician from a distance is called to advise another physician about his own illness or about that of one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered him. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss may, in part at least, be provided for in the compensation offered.

ONE PHYSICIAN IN CHARGE

Sec. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select one physician to take charge of the case. The family may ask the physician in charge to call in other physicians to act as consultants.

ARTICLE III.—DUTIES OF PHYSICIANS IN CONSULTATIONS

CONSULTATIONS SHOULD BE ENCOURAGED

Sec. 1.—In a case of serious illness, especially in doubtful or difficult conditions, the physician should request consultations.

*Nicon, father of Galen.

CONSULTATION FOR PATIENT'S BENEFIT

Sec. 2.—In every consultation, the benefit to the patient is of first importance. All physicians interested in the case should be candid with the patient, a member of his family or a responsible friend.

PUNCTUALITY

Sec. 3.—All physicians concerned in consultations should be punctual. When, however, one or more of the consultants are unavoidably delayed, the one who arrives first should wait for the others for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any other reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or it be the desire of the patient, his family or his responsible friends, the consultant may examine the patient and mail his written opinion, or see that it is delivered under seal to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

PATIENT REFERRED TO CONSULTANT

Sec. 4.—When a patient is sent to a consultant and the physician in charge of the case cannot accompany the patient, the physician in charge should provide the consultant with a history of the case, together with the physician's opinion and outline of the treatment, or so much of this as may be of service to the consultant. As soon as possible after the consultant has seen the patient he should address the physician in charge and advise him of the results of the consultant's investigation. The opinions of both the physician in charge and the consultant are confidential and must be so regarded by each.

DISCUSSIONS IN CONSULTATION

Sec. 5.—After the physicians called in consultation have completed their investigations, they and the physician in charge should meet by themselves to discuss the course to be followed. Statements should not be made nor should discussion take place in the presence of the patient, his family or his friends, unless all physicians concerned are present or unless all of them have consented to another arrangement.

RESPONSIBILITY OF ATTENDING PHYSICIAN

Sec. 6.—The physician in charge of the case is responsible for treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, after such a change, it is best to call another consultation; then the physician in charge should state his reasons for departure from the course decided at the previous conference. When an emergency occurs during the absence of the physician in charge, a consultant may assume authority until the arrival of the physician in charge, but his authority should not extend further without the consent of the physician in charge.

CONFLICT OF OPINION

Sec. 7.—Should the physician in charge and a consultant be unable to agree in their view of a case, another consultant should be called or the differing consultant should withdraw. However, since the patient employed the consultant to obtain his opinion, he should be permitted to state it to the patient, his relative or his responsible friend, in the presence of the physician in charge.

CONSULTANT AND ATTENDANT

Sec. 8.—When a physician has acted as consultant in an illness, he should not become the physician in charge

in the course of that illness, except with consent of the physician who was in charge at the time of the consultation.

ARTICLE IV. DUTIES OF PHYSICIANS IN CASES OF INTERFERENCE

MISUNDERSTANDINGS TO BE AVOIDED

Section 1.—A physician, in his relationship with a patient who is under the care of another physician, should not give hints relative to the nature and treatment of the patient's disorder; nor should a physician do anything to diminish the trust reposed by the patient in his own physician. In embarrassing situations, or whenever there seems to be a possibility of misunderstanding with a colleague, a physician should seek a personal interview with his fellow.

SOCIAL CALLS ON PATIENT OF ANOTHER PHYSICIAN

Sec. 2.—When a physician makes social calls on another physician's patient he should avoid conversation about the patient's illness.

SERVICES TO PATIENT OF ANOTHER PHYSICIAN

Sec. 3.—A physician should not take charge of, or prescribe for another physician's patient during any given illness (except in an emergency) until the other physician has relinquished the case or has been formally dismissed.

CRITICISM TO BE AVOIDED

Sec. 4.—When a physician does succeed another physician in charge of a case, he should not disparage, by comment or insinuation, the one who preceded him. Such comment or insinuation tends to lower the confidence of the patient in the medical profession and so reacts against the patient, the profession and the critic.

EMERGENCY CASES

Sec. 5.—When a physician is called in an emergency because the personal or family physician is not at hand, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the personal or family physician. However, he should first report to the personal or family physician the condition found and the treatment administered.

PRECEDENCE WHEN SEVERAL PHYSICIANS ARE SUMMONED

Sec. 6.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as is practicable, or on the arrival of the acknowledged personal or family physician, the first physician should withdraw. Should the patient, his family or his responsible friend wish some one other than he who has been in charge of the case, the patient or his representative should advise the personal or family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital without the knowledge of the physician who is known to be the personal or family physician, the patient should be returned to the care of the personal or family physician as soon as is feasible.

A COLLEAGUE'S PATIENT

Sec. 7.—When a physician is requested by a colleague to care for a patient during the colleague's temporary absence, or when because of an emergency a physician is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy that he would wish used. The patient should be returned to the care of the attending physician as soon as possible.

SUBSTITUTION IN OBSTETRIC WORK

Sec. 8.—When a physician attends a woman who is

in labor because the one who was engaged to attend her is absent, the physician summoned in the emergency should resign the patient to the first engaged, on his arrival. The one in attendance is entitled to compensation for the professional service he may have rendered.

ARTICLE V.—DISPUTES BETWEEN PHYSICIANS ARBITRATION

Sec. 1.—Whenever there arises between physicians a grave difference of opinion, or of interest, which cannot be promptly adjusted, the dispute should be referred for arbitration, preferably to an official body of a component society.

ARTICLE VI.—COMPENSATION LIMITS OF GRATUITOUS SERVICE

Section 1.—Poverty of a patient, and the obligation of physicians to attend one another and the dependent members of the families of one another, should command the gratuitous services of a physician. Institutions and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes, should meet such costs as are covered by the contract under which the service is rendered.

CONDITIONS OF MEDICAL PRACTICE

Sec. 3.—A physician should not dispose of his services under conditions that make it impossible to render adequate services of a patient, except under circumstances in which the patients concerned might be deprived of immediately necessary care.

CONTRACT PRACTICE

Sec. 2.—Contract practice as applied to medicine means the practice of medicine under an agreement between a physician or a group of physicians, as principals or agents, and a corporation, organization, political subdivision or individual, whereby partial or full medical services are provided for a group or class of individuals on the basis of a fee schedule, or for a salary or for a fixed rate per capita.

Contract practice *per se* is not unethical. Contract practice is unethical if it permits of features or conditions that are declared unethical in these Principles of Medical Ethics or if the contract or any of its provisions causes deterioration of the quality of the medical services rendered.

FREE CHOICE OF PHYSICIAN

Sec. 4.—Free choice of physician is defined as that degree of freedom in choosing a physician which can be exercised under usual conditions of employment between patients and physicians. The interjection of a third party who has a valid interest, or who intervenes between the physician and the patient does not *per se* cause a contract to be unethical. A third party has a valid interest when, by law or volition, the third party assumes legal responsibility and provides for the cost of medical care and indemnity for occupational disability.

COMMISSIONS

Sec. 5.—When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, the giving or receiving of a commission by whatever term it may be called or under any guise or pretext whatsoever is unethical.

PURVEYAL OF MEDICAL SERVICE

Sec. 6.—A physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit exploitation of the services of the physicians for the financial profit of the agency concerned. Such a procedure is beneath the dignity of profes-

sional practice and is harmful alike to the profession of medicine and the welfare of the people.

CHAPTER IV

The Duties of Physicians To The Public PHYSICIANS AS CITIZENS

Section 1.—Physicians, as good citizens, possessed of special training, should advise concerning the health of the community wherein they dwell. They should bear their part in enforcing the laws of the community and in sustaining the institutions that advance in the interest of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations.

PUBLIC HEALTH

Sec. 2.—Physicians, especially those engaged in public work, should enlighten the public concerning quarantine regulations and measures for the prevention of epidemic and communicable diseases. At all times the physicians should notify the constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities. When an epidemic prevails, a physician must continue his labors without regard to the risk of his own health.

PHARMACISTS

Sec. 3.—Physicians should recognize and promote the practice of pharmacy as a profession and should recognize the cooperation of the pharmacist in education of the public concerning the practice of ethical and scientific medicine.

CONCLUSION

These principles of medical ethics have been and are set down primarily for the good of the public and should be observed in such a manner as shall merit and receive the endorsement of the community. The life of the physician, if he is capable, honest, decent, courteous, vigilant and a follower of the Golden Rule, will be in itself the best exemplification of ethical principles.

Respectfully submitted,

Edward R. Cunniffe, Chairman
Louis A. Buie
Walter F. Donaldson
Homer L. Pearson, Jr.
John H. O'Shea

AMERICAN COLLEGE OF PHYSICIANS

Regional Meeting

University of Oklahoma School of Medicine

OKLAHOMA CITY

Sept. 10, 1949

Write the Chairman and Governor, Wanu Laugston, M.D., 515 N. W. 11th, Oklahoma City, Oklahoma, for further details and dinner reservations. Make hotel reservations direct to the BILTMORE Hotel, Oklahoma City.

SECOND INTERNAL MEDICINE COURSE BEGINS IN OCTOBER

The Oklahoma State Postgraduate course in Internal Medicine will begin the second series of lectures in Tahlequah, Muskogee, Okmulgee, McAlester and Poteau the week of October 3, 1949. These lectures will continue for the ensuing 10 weeks.

The Postgraduate Committee is happy to report that the registration for the first series of lectures now in progress has been most excellent. We are hearing many pleasing reports regarding Doctor Becker's teaching ability. Doctor Becker will be giving lectures in the various sections of the state during the next two years. With his background of intensive training and clinical experience in the diagnostic centers in Chicago and Boston, we can be assured of getting the most recent advances in Internal Medicine.

Announcement letters have been mailed to physicians in the second circuit and those who have not already enrolled should mail their enrollments to the Oklahoma State Medical Association, 210 Plaza Court, Oklahoma City, at once.

OKLAHOMAN RECEIVES HEART INSTITUTE GRANT

National Heart Institute grants of more than \$1,200,000 to support heart disease research work in medical schools and hospitals in 21 states, the District of Columbia, and Canada have been announced.

Included was a grant of \$3,483 to J. Moore Campbell, M.D., University of Oklahoma School of Medicine, for "Artificial aortic valve correcting aortic regurgitation. Extracorporeal blood oxygenation."

DO YOU KNOW?

That Blue Cross in Oklahoma now has enrolled over 80 thousand rural subscribers? And that 1,375 families in Jackson county enrolled during the recent county wide enrollment sponsored cooperatively by the Altus Chamber of Commerce, the Lions Clubs of Eldorado and Blair and the Home Demonstration Council?

PSYCHIATRY SOCIETY ELECTS OFFICERS

At a meeting held at Eastern Oklahoma Hospital, Vinita, June 27, new officers were elected for the Oklahoma Society of Psychiatry and Neurology. They are Charles E. Leonard, M.D., Oklahoma City, president; Charles F. Obermann, M.D., Oklahoma City, vice-president.

CALL FOR OLD JOURNALS

All physicians having copies of 1934 and 1917 issues of the Journal of the Oklahoma State Medical Association are asked to send them to the Executive Office, 210 Plaza Court, Oklahoma City, for the Association's bound volumes. Any issues for those years will be appreciated so that the Journal files in the Association Library can be complete.

ANNOUNCEMENTS

PUBLIC HEALTH SERVICE. A competitive examination for appointment of Medical Officers in the regular corps of the United States Public Health Service will be held October 3, 4, and 5, 1949. Applications must be received no later than September 5, 1949.

AMERICAN BOARD OF OBS.-GYN. New bulletins incorporating changes made at the recent meeting of the American Board of Obstetrics and Gynecology are now available. Next scheduled examination (Part 1) will be held Feb. 3, 1950. Applications may be made until Nov. 5, 1949.

OKLAHOMA STATE MEDICAL ASSOCIATION. Annual meeting, May 14, 15, 16, 17, 1950, Skirvin Hotel, Oklahoma City.

INTERNATIONAL COLLEGE OF SURGEONS. Fourteenth annual assembly and convocation Nov. 7, 8, 9, 10, 11, 12, 1949, Atlantic City, New Jersey.

CHICAGO MEDICAL SOCIETY. Two one-week courses—October 12-22, 1949, cardio-renal and peripheral vascular diseases; October 24-29, 1949, obstetrics, endocrine-gynecology and sterility. For information and application write the Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Ave., Chicago 2, Illinois.

SECRETARIES AND EDITORS CONFERENCE.

Annual secretaries and editors conference will be held at A.M.A. headquarters in Chicago Nov. 3 and 4, 1949.

SOUTHWEST REGIONAL CANCER CONFERENCE. Third annual conference will be held in Fort Worth, Texas, November 9, 1949, at the Blackstone Hotel, under the auspices of the Tarrant County Medical Society and the Tarrant County Unit, American Cancer Society. Guest speakers will include Merton M. Minter, M.D., internist, San Antonio; R. A. Willis, M.D., pathologist, London; Stanley Reinmann, M.D., research pathologist, Philadelphia; Norman Treves, M.D., surgeon, New York City; Danely P. Slaughter, M.D., surgeon, Chicago; Saul Sugar, M.D., ophthalmologist, Detroit. No registration fee. Other information may be obtained by writing the Tarrant County Medical Society, 209 Medical Arts Building, Fort Worth 2, Texas.

OKLAHOMA CITY CLINICAL SOCIETY. Biltmore Hotel, October 24, 25, 26, 27, 1949.

AMERICAN ACADEMY OF GENERAL PRACTICE. 1950 scientific assembly will be held in St. Louis, Mo., February 20, 21, 22 and 23. Headquarters will be the Kiel Auditorium.

Veterans Administration in June opened a new 399-bed general medical and surgical hospital in Providence, Rhode Island, bringing the total number of V-A hospitals to 129.



Dorsey *Going Your Way*

FOLLOWING a parallel route to a similar destination, the ethical pharmaceutical maker necessarily keeps the progress and direction of scientific medicine constantly in view.

For a closer look at medicine's progress and full comprehension of its implications, the Smith-Dorsey Company has expanded its research facilities, secured increased research grants and added research personnel.

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HONORARY, LIFE CERTIFICATES 50 YEAR PINS AWARDED

Midsummer ceremonies in four Oklahoma towns marked the golden anniversary — 50 years in the practice of medicine — for eight Oklahoma physicians. Awarded the 50 Year Club gold lapel pin were E. L. Collins, M.D., Panama, S. C. Dean, M.D., Howe, S. P. Ross, M.D., formerly of Ada and now of Oklahoma City; W. R. Joblin, M.D., Porter; J. L. Blakemore, M.D., Muskogee; J. Hutchings White, M.D., Muskogee; L. D. Bruton, M.D., Muskogee; and M. K. Thompson, M.D., Muskogee.

Certificates Given

Other awards given recently by the Association to outstanding Oklahoma physicians included an honorary membership certificate to W. A. Tolleson, M.D., Eufaula; and life membership certificates to R. D. Stoner, M.D., Checotah, and Drs. Blakemore, White, Bruton, and Thompson.

Drs. Joblin and Tolleson and the Muskogee doctors received their pins and certificates at a Ninth Councilor District meeting held in Muskogee July 20, at the Muskogee Country Club.

Dr. Tolleson was born Dec. 31, 1869, near Charleston, Ark., and received his education at Ozark and Searey, Ark. He studied medicine under Dr. J. F. Blackburn as preceptor at Ozark while working in a drug store. Later he studied in medical schools at St. Louis including Barnes Medical College and Missouri Medical College, where he graduated in March, 1895.

Following his graduation, he came to Indian Territory, stopping at Sapulpa, and later practiced medicine at Keokuk Falls, Okmulgee, Texoma, Wagoner and Eufaula, where he now practices, and Yoakum.

He qualified with the Creek national board on credentials in 1900 and married Georgia Ella Stidham, a citizen of the Creek Nation, in 1901. He has done post-graduate work at Chicago Postgraduate Medical School, the New Orleans Post Graduate Medical School and Mayo Clinic, New York Post Graduate Medical School and in St. Louis. He has served as secretary of his

county medical society for many years and has also held other offices in his county and state medical organizations.

Also from Arkansas is Jesse Lee Blakemore, who was born at Greenwood, May 26, 1872. He received his early education there and in the high school at Booneville, Ark. In September of 1882 he entered Emory and Henry College in Emory, Va., graduating in June, 1885, and returning to Greenwood as a rural school teacher and general store clerk.

He entered the Memphis Medical Hospital College in 1886 and in March, 1887, returned home to practice medicine. He later entered the Vanderbilt University Medical School at Nashville, Tenn., graduating March 3, 1888. He served for a time at head of the Arkansas State Hospital resigning in 1891 and coming to Muskogee a year later. He helped organize the Muskogee Town and Country Club and was member of the Ozark and Wauhilla clubs. He is a Mason and a member of the Presbyterian church.

The third Arkansan is Dr. Joblin, who was born at Batesville, Ark., Feb. 6, 1873, receiving his medical education from St. Louis Medical College, later Washington university. He graduated in 1896 and went to Newport, Ark., to begin his medical practice, later going to Mountain View, Ark., and finally to Porter in 1905. He frequently taught classes of student nurses materia medica at the Martha Robb Hospital, Muskogee's first medical institution.

Dr. White was born April 17, 1873, in White Oak, Va., and received his education in the Virginia A. and M. College, the University of Virginia School of Medicine, graduating in 1896, and serving his internship at the New York Polyclinic. He was medical superintendent of the old Marion Street Maternity clinic in New York.

Coming to Muskogee in 1902, he served as president of the State Medical Association, Muskogee County Medical Society, the Oklahoma Baptist Hospital staff,



L. C. Kuyrkendall, M.D. McAlester, presents 50 Year Pins to Dr. Collins (left) and Dr. Dean.

and as a member of the board of directors and executive board of the Oklahoma Baptist Hospital. He served overseas during World War I as a captain in the medical corps.

Another Muskogee physician to receive both a 50 year pin and life membership certificate was L. D. Bruton, M.D., who was born in Missouri June 19, 1870. He was graduated from Barnes Medical School in St. Louis in April, 1897, and took post graduate courses at Chicago and New York and practiced medicine in Missouri until coming to Muskogee in 1909.

From Pinelog, Georgia, to Muskogee, Oklahoma, is the story of M. K. Thompson's, M.D. life. Dr. Thompson received his A.B. degree at Austin College, Sherman, Texas, in 1892 and taught Latin and Greek at Lawson, Mo., college. He came to Indian Territory in 1894, and in May, 1897, graduated from Emory University, Atlanta, Ga. He studied and practiced in Kansas City, in the New York Eye and Ear College and Clinic and in London, Paris, and Vienna, before returning to Oklahoma. For many years he was acting consultant at the Veterans Hospital and is now oculist for the State School for the Blind, the MKT railroad and the K.O. & G. railroad and the Midland Valley railroad. He is a member of the First Presbyterian Church, a charter member of Kiwanis, a 32nd degree Mason, a member of the Shrine and other Masonic orders and the Muskogee chamber of commerce.

Dr. Stoner of Checotah was born in Dundee, Iowa, May 15, 1899, graduating from the Epworth Seminary at Epworth, Iowa, in 1818 and nursing in the Oakdale Tubercular Sanitarium from 1918 to 1920 when he came to Oklahoma to graduate from Oklahoma City University in 1924. He taught school at Thatcher, Colo. and in 1926 enrolled in the medical department of the University of Oklahoma, graduating in 1930, and serving as intern at the University Hospital in Oklahoma City. He later practiced medicine in Ardmore, Waupnucka, Atoka, Wetumka, and Checotah, before joining the army in 1942. He returned to Checotah in 1945 to resume the practice of medicine.

Dr. Ross, who now makes his home in Oklahoma City with his daughter, practiced in Ada for more than 30 years. His story starts back in Macon county, Mo., where he was born Nov. 14, 1862. He moved with his parents to Texas in 1872. Later he went to Savory

College, Savory, Texas, going after graduation to Gainesville and a job in a drugstore. In 1883 he established a drug store at Ravenna, Texas. He was married in 1886 to the daughter of a doctor and in 1888 he established another drug store in Houston remaining there eight years until 1896 when he went to New Orleans and started studying medicine at Tulane University. Later he studied in the medical department of Texas University at Galveston. He came to Caney, Indian Territory, in 1899 as an undergraduate, going back to school in 1901 and 1902 and completing his course at Baylor. Then he went back to Indian Territory and a job with a coal company at Savannah where he stayed three years before moving to Kiowa in 1905 and coming to Ada in 1911. He was city health officer for 10 years and a railroad surgeon for many years.

Samuel C. Dean, M.D., veteran LeFlore county physician, has practiced in Howe since Sept. 1, 1900. He was born in Nicholshille, Kentucky, and finished high school there. He spent four years at the University of Kentucky at Lexington and later studied medicine at Barnes Medical College at St. Louis. Active in civic affairs, Dr. Howe was president of the first school board at Howe and was also the first Worshipful Master of the Howe Lodge No. 290, A.F. & A.M. and is the only living charter member of the lodge. He was made at 32nd degree Mason in 1918. When the bank at Howe was organized in 1903 Dr. Dean became the first president and held that office until the bank was liquidated in 1937. He also was a director and later served as president of the LeFlore County National Bank at Poteau.

Dr. Collins, who was born in Lamar County, Alabama, was one of six sons, four of whom became doctors. He attended the Memphis Hospital Medical College during 1891-92 and was graduated from the Chattanooga Medical College in 1894 and moved to Indian Territory, settling at Wilburton. After practicing at Wilburton from 1894 to 1896, Dr. Collins moved to McAlester for three years and in 1899 he came to Panama and has practiced there since that time. He is president of the Central National Bank at Poteau and has been a member of the Panama school board since 1909. He is a charter member of the Lions club and the LeFlore County Medical Association.



Photographed at the Ninth Councilor District Meeting in Muskogee are: back row, left to right, L. C. Kuyrkendall, M.D., McAlester; A. N. Earnest, M.D., Muskogee; I. C. Wolfe, M.D., Muskogee; Virgil Matthews, M.D., Muskogee; J. B. Oldham, M.D., Muskogee; James Stevenson, M.D., Tulsa; George Garrison, M.D., Oklahoma City; F. W. Ewing, M.D., Muskogee; John F. Burton, M.D., Oklahoma City; Harry Ogden, Muskogee (president of the First National Bank); S. D. Neely, M.D., Muskogee; E. M. Henry, M.D., Muskogee; F. R. First, Jr., M.D., Checotah; seated, left to right, L. D. Bruton, M.D., Muskogee; Raymond Stoner, M.D., Checotah; W. R. Joblin, M.D., Porter; W. A. Tolleson, M.D., Eufaula; M. K. Thompson, M.D., Muskogee; J. H. White, M.D., Muskogee; and Maurice Searle, M.D., Tulsa.

BOOK REVIEWS

MEDICINE OF THE YEAR. John B. Youmans, M.D., Editor. Philadelphia, J. B. Lippincott Company. 1949. Price \$5.00.

This new review of progress in medicine under the editorial supervision of John B. Youmans, M.D., approaches quite closely the goal set out in its introduction:

"It is hoped that **MEDICINE OF THE YEAR** will provide the practitioner with a readable, brief, concise presentation of the changing events in medicine during the preceding year and help him keep abreast of progress."

Categorically, there are a number of features which recommend it specifically to this group:

1. It embraces the whole field of medicine and for this reason it has been possible for the editors to avoid duplications which are necessary in separate specialty reviews.

2. The bibliography is for the most part limited to readily available publications in English.

3. The text is readable, understandable, and avoids scientific jargon known only to specialists in given fields.

4. The reviewers have with remarkable restraint stayed away from flights of the imagination into the potential significance of discoveries. As a matter of fact they have avoided reference to newness which has not had clinical trial and approval.

5. Much of the material relates to every day problems of general practice.

There are but three criticisms which might be of interest to the editors in the preparation of future issues and these are not too serious:

1. There are spots which are too kaleidoscopic to be of any value — this space could well be used to

2. Go into a little prose detail into methods and techniques which are of great practical value to the general man.

3. This degree of detail is seen most frequently in passages in which the subject is of special interest to the reviewer.

Dr. Youmans and his staff deserve **THE JOURNAL'S** congratulations and support in the interest of continued education of the physicians of Oklahoma.—Ben H. Nicholson, M.D.

EYE, EAR, NOSE AND THROAT MANUAL FOR NURSES. Roy H. Parkins, M.D., F.A.C.S., Head oculist and aurist to St. Joseph's Hospital, San Francisco, California. St. Louis, Missouri. C. V. Mosby Company. Sixth Edition. 1949. Price \$3.00.

One of the most paramount needs in the field of medical literature is more simplified, yet accurate, didactic material for our nurse assistants. Our dependence on the proper scientific dispatch of their duties is well known to all doctors, yet instruction in specific fields is usually carried out only through word of mouth, observation, and a great deal of personal ingenuity on the part of the nurses. Dr. Parkinson's book in 250

pages presents in a concise, simple, and accurate manner, the underlying principles and detailed technique necessary for good nursing in both office and hospital for those patients receiving treatment in the field of ophthalmology or otolaryngology. I have read no other material which will give a nurse more information concerning her specific duties in this specialty. It is short, yet complete. The book tells the nurse When, How, and Why, in the office, operating room, and at the hospital bedside. One finds easy reference to facilitate proper operative setup for various procedures in these fields. Simple description of the operations and their aims insures better understanding assistants.

The last chapter in the book concerns the problems met by the Public Health Nurse. This is a fitting conclusion. Since many of these nurses must undertake the responsibility of actually treating certain conditions of the eye, ear, nose, or throat, certainly competent reference and instruction is necessary. The fundamentals presented in the previous chapters, followed by the specific instructions in common problems, makes this a worthwhile book for the Public Health Nurse and the Industrial Nurse. This book is extremely valuable to all nurses working in the field of ophthalmology or otolaryngology.—J. V. D. Hough, M.D.

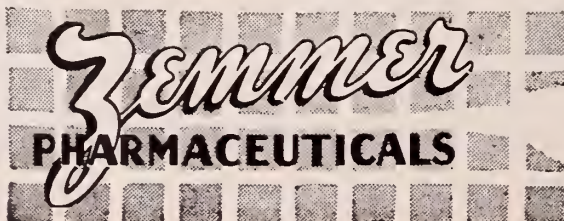
CLINICAL ASPECTS AND TREATMENT OF SURGICAL INFECTIONS. Frauk Lamont Meleney, M.D., F.A.C.S., Associate Professor of Clinical Surgery, College of Physicians and Surgeons, Columbia University; Associate Visiting Surgeon, Presbyterian Hospital, New York City. W. B. Saunders Company, 1949.

It was inevitable that eventually a book would be written concerning the treatment of surgical infections by the use of sulfonamides and the antibiotics. The subject is presented in such a manner that it gives a comparison of the results of therapy in the pre-sulfonamide and antibiotic era with the results since the discovery and extensive use of these drugs. That the author is well qualified to make such a comparison is well proved when we learn that it was in his laboratory bacitracin was discovered.

In the volume, bacteriology and immunology are constantly stressed. The advisability of close association between the bacteriologist and the surgeon is emphasized. The initial chapter on the physiological consideration of surgical infections is one of the strongest and most important.

The peculiarities of surgical infections in the various systems, viscera and tissues of the body are treated in detail in the various chapters. The volume is well illustrated with plates of clinical charts, anatomy, x-rays, and views of various infections. Illustrative case histories are utilized in a very clarifying manner. At the end of each chapter is a complete list of references.

This text has filled a rather glaring empty space in the library of every student of surgery. It has been well done.—Leo J. Starry, M.D.



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DIABETICS

A million or more diabetics are undetected and untreated.[†] But only about 55,000 new cases are being discovered each year in the course of insurance examinations and routine checkups. Early diagnosis and prompt treatment give the physician his best opportunity to ameliorate the disease and to avert or delay its complications.

An urgent problem

How shall the unknown diabetic be detected and directed to the doctor's office for diagnosis and proper treatment?

An important answer

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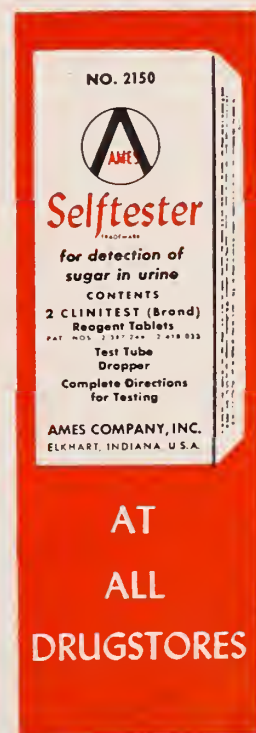
The Ames Selftester for detection of sugar in urine is approved by the Council of the American Diabetes Association. It is a simple, reliable screening test to establish the presence or absence of urine-sugar and "refer" those with glycosuria to you for diagnosis.

The directions state:

1. The Selftester does not diagnose diabetes or any other disease. Its sole function is the detection of sugar (glucose) or sugar-like substances.
2. If reaction is positive, see your doctor at once. Sugar in your urine does not necessarily mean you have diabetes (nor does a negative result definitely exclude the presence of disease). But only your doctor, by medical examination and by additional laboratory tests, can tell you why you show sugar.

[†] Wilkerson, H. L. C. and Krall, L. P.: Diabetes in a New England Town, Journal of the American Medical Association, 135:209 (Sept. 27) 1947.

*Ames **Selftester**—TRADE MARK



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HAVE YOU HEARD?

Royce B. Means, M.D., has recently moved from Ardmore to Wilson, Oklahoma.

Maj. Richard J. Brightwell is taking a residency for two years in general practice at Colorado Medical Center, 4200 East Ninth Ave., Denver 7, Colo.

Sixteen Oklahoma City physicians have recently moved into the new Medical Center at 525 N.W. 11th. They are William G. McCreight, M.D., Fannie Lou Leney, M.D., Paul N. Vickers, M.D., S. N. Stone, M.D., C. R. Rountree, M.D., James Amspacher, M.D., Charles Leonard, M.D., H. V. L. Sapper, M.D., J. Neill Lysaught, M.D., A. M. Young, M.D., Charles A. Royer, M.D., Byron E. Williams, M.D., Joseph Kelso, M.D., Wann Langston, M.D., George N. Barry, M.D., and John J. Donnell, M.D.

Kenneth E. Bohan, M.D. is now associated in practice in Oklahoma City with J. B. Snow, M.D., W. M. Taylor, M.D., and C. W. Freeman, M.D.

Earl D. McBride, M.D., Oklahoma City, has returned from several weeks in Japan. He spoke June 15 at the Eighth Army medical meeting in Osaka, Honshu, Japan.

M. L. Henry, M.D., McAlester, explained the proposed plan of socialized medicine to the members of the McAlester Exchange Club recently.

R. C. Gentry, M.D., Bartlesville, was speaker before the Bartlesville Lions club recently on compulsory health insurance.

R. K. McIntosh, M.D., Tahlequah, is one of the owners of a new professional building being constructed there.

Kenneth Preacher, M.D., a 1948 graduate of the University of Oklahoma is now on the staff of the Whiteneck clinic in Waynoka.

F. E. Flack, M.D., a former resident of Tulsa, is now associated with R. G. Obermiller, M.D. in Woodward.

Robert W. Head, M.D. and Thomas D. Howard, M.D. have recently joined the Williams hospital-clinic in Idabel. Both were graduated from the University of Oklahoma School of Medicine.

Tom L. Wainwright, M.D., formerly of Oklahoma City, is now practicing in Mangum.

Homer C. Wheeler, M.D., McAlester, was elected president of the McAlester Exchange Club at a recent meeting.

E. C. Keys, M.D., formerly of Pawhuska, is now practicing in Taloga.

Malcolm Horne, M.D., a member of the music faculty at Oklahoma A. and M. College before receiving his M.D. degree, is now practicing in Ardmore.

Sam A. Capehart, M.D., a graduate of the University of Oklahoma School of Medicine, has begun practice in Okemah.

C. A. Hicks, M.D., Holdenville, is the new vice-president of the Rotary Club of that city.

Fred W. Becker, M.D. and Malcolm Mollison, M.D., both graduates of the University of Oklahoma School of Medicine, are now practicing in Altus.

M. H. Newman, M.D., Shattuck, has been named a member of the executive committee of the Oklahoma Advisory Council of Health at a meeting held recently in Oklahoma City.

Port Johnson, M.D., Muskogee, discussed "Polio" at a meeting of the Muskogee Optimist Club.

Roger Reid, M.D., Ardmore, is the new president of the Ardmore Rotary Club.

Calwalder W. Arrendell, jr., M.D. has returned to Ponca City and joined his father, C. W. Arrendell, sr., M.D. and brother, Eugene H. Arrendell, M.D., in practice.

OBITUARIES

CALMES P. BISHOP, M.D. 1912-1949

Calmes P. Bishop, M.D., former director of the Muskogee City-County Health Unit, and recently of Frederick, Colo. died July 2.

Dr. Bishop was born Feb. 8, 1912 at Big Cabin, Okla. and attended grade and high school in Guthrie. After his graduation from the University of Oklahoma Medical School in 1937 he went to the Presbyterian Hospital in Denver where he served his internship. He then practiced in Picher until he entered the service. After serving as a major in the Pacific theater he was discharged about Sept. 1, 1946. He left Muskogee about a year ago.

Survivors include the widow, his parents, three sisters and two brothers.

JOHN S. ROLLINS, M.D. 1886-1949

John S. Rollins, M.D., Prague, died July 18, 1949.

He was born at Clanton, Alabama, December 19, 1886. He attended Memphis Medical College and was graduated from St. Louis College of Physicians and Surgeons in 1917.

Three times president of the Lincoln County Medical Society, he was also a past president of the Okfuskee County Medical Society. He had also served as secretary of the Lincoln County Medical Society and as a delegate. He had operated the Rollins Hospital in Prague since 1933.

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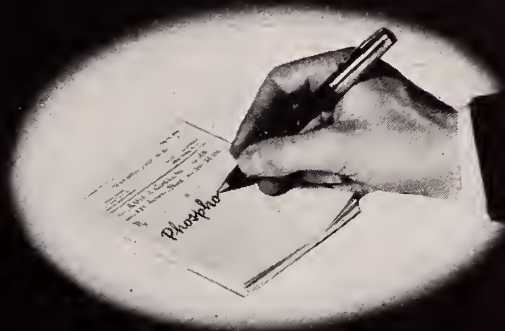
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OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES

MINUTES OF THE SECOND SESSION

May 15, 1949

The meeting of the House of Delegates reconvened at 7:00 P.M. in the Ivory Room of the Mayo Hotel, and was called to order by the Speaker of the House, L. C. McHenry, M.D. A. R. Sugg, M.D., Ada, Chairman of the Credentials Committee, reported a quorum present.

The first item on the agenda was a report of the Resolutions Committee. The Speaker called upon Austin Bell, M.D., of Oklahoma City, Chairman, to render the report of the Committee. Dr. Bell read the following Resolutions, each of which was adopted on *motion* duly made and *seconded* and *unanimously passed*.

Resolution

WHEREAS, Every practicing member of the medical profession recognizing the contribution to the efficiency of his practice which is made by the assistants in his office, and

WHEREAS, His assistants must be prepared at all times to deal tactfully and diplomatically with the peculiarities and complaints of his patients and his own foibles, and

WHEREAS, The work is in every detail strenuous and exacting, and

WHEREAS, The Medical Assistants Society, composed of this group of well trained, willing co-workers, have organized themselves together for the purposes of improving their own efficiency and their value to the Doctor of Medicine with whom she works,

NOW THEREFORE BE IT RESOLVED, That the Oklahoma State Medical Association express to the Medical Assistants Society its gratitude for their efforts on the doctors' behalf both individually and as a group.

Resolution

WHEREAS, The Medical Service Society, composed of representatives of pharmaceutical and biological houses, has rendered a great service to the medical profession of this State, and

WHEREAS, the Medical Service Society is at all times ready and willing to accept its responsibilities in bringing about a better understanding and cooperation between the medical profession and the representatives of their companies, and

WHEREAS, The Medical Service Society has made an outstanding contribution both financially and otherwise to the Medical Research Foundation,

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association commends the Medical Service Society for its outstanding achievements and assures the Medical Service Society of the continued good will of the Oklahoma State Medical Association and with the hope and best wishes for a continued growth and expansion.

Resolution

WHEREAS, As the Oklahoma State Medical Association is fully aware of the need for physicians for rural and general practice, and

WHEREAS, The Medical School of the University of Oklahoma has seen fit to pioneer in the field of preceptorship for young physicians by placing them in rural communities for practical training, and

WHEREAS, This program should be given every encouragement possible in order that the people of Oklahoma in all areas may have the best medical care possible,

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association commend the Board of Regents of the University of Oklahoma, the President of the University of Oklahoma, Dr. George L. Cross, and the Dean of the Medical School of the University of Oklahoma, Mark R. Everett, Ph.D., for this practical approach to a difficult social and economic problem and pledges the entire support of the Association to the end that this program may succeed to the fullest extent.

Resolution

WHEREAS, The people of the State of Oklahoma and the United States as a result of the untiring efforts of the medical profession, now enjoy the best health, the finest medical care, and the greatest life expectancy of any comparable group of people in the world, and

WHEREAS, those great benefits to the people have been made possible and have become a reality under a system of medical practice unfettered by governmental interference and control, and

WHEREAS, the adoption of any type of socialized medicine or national compulsory health insurance in other countries of the world in every case has clearly demonstrated a lowering in the health standards of the people and a lessening of the quality of their medical care in addition to imposing an unbearable burden on the national economy and the taxpayers, and

WHEREAS, the medical profession in Oklahoma stands firm in its belief in the traditional American principles of freedom of enterprise in all fields of endeavor, and

WHEREAS, no system of socialized or government medicine can be reasonable considered to be consistent with its principles;

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association at its 56th Annual Meeting in Tulsa, Oklahoma, this 15th day of May, 1949, expresses the unalterable opposition of the Oklahoma State Medical Association to any system which will enforce upon the people of this State and the United States any type of governmentally-controlled and administered medical care, and

BE IT FURTHER RESOLVED, That copies of this resolution shall be directed to the President of the United States, to the members of the Oklahoma delegation in Congress, to the Chairman of the United States Senate Committee on Labor and Public Welfare, and the House of Representatives Committee on Interstate and Foreign Commerce, to the Federal Security Administrator, and to the headquarters of the American Medical Association.

Resolution

WHEREAS, There is a growing tendency in the United States today toward interference and regulation in every field of human endeavor, and

WHEREAS, such interference and regulation is the

opening wedge for the encroachment of the socialistic system on the present American system of freedom of endeavor and enterprise, and

WHEREAS, this tendency is not in any way limited to the interests of any particular group, but is being manifested in such widely varied fields as the practice of medicine, housing, power production and distribution and even agriculture,

NOW THEREFORE BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 56th Annual Meeting in Tulsa, Oklahoma, this 15th day of May, 1949, that the Oklahoma State Medical Association hereby denounces as undemocratic and un-American, all and any efforts aimed toward the socialization of any business, industry, group or profession, and

BE IT FURTHER RESOLVED that copies of this Resolution are to be directed to the President of the United States and the members of the Oklahoma Delegation in Congress.

Resolution

The House of Delegates in the 56th Annual Session of the Oklahoma State Medical Association desires to go on record and express appreciation to The Commonwealth Fund of New York for its liberal financial support in making possible the postgraduate instruction in obstetrics, pediatrics, internal medicine, surgical diagnosis, gynecology, and a second course in internal medicine in the State of Oklahoma.

From resolutions of County Medical Societies, comments of individuals physicians, and the enthusiasm in the course in Internal Medicine which will be initiated in July, 1949, it is apparent that hundreds of physicians throughout the State are appreciative of, and have benefited by reason of these courses.

We request that a copy of this resolution be sent to The Commonwealth Fund of New York.

Resolution

WHEREAS, the advancement of medical science and knowledge and the consequent increase in the complexity of present-day medical care has brought about an unavoidable increase in the costs of medical care, and

WHEREAS, this increased cost, along with present general inflationary tendencies is a heavy burden upon any person requiring medical and hospital care at a time when he is least able to bear such a burden, and

WHEREAS, voluntary health and medical care plans are available and offer to all the people a means of budgeting the necessary expenses of such care, and

WHEREAS, these voluntary plans are available without governmental interference and regulation, and

WHEREAS, these plans are now being provided at a cost to the individual much lower than would be the cost of any type of national compulsory health insurance, and

WHEREAS, these voluntary plans for medical care are growing daily and can readily be expanded to include all persons who could be covered under any government plan,

NOW THEREFORE BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 56th Annual Meeting in Tulsa, Oklahoma, this 15th day of May, 1949, that the Oklahoma State Medical Association hereby reaffirms its support and endorsement of every type of voluntary health and medical care coverage available through the commercial insurance companies, fraternal organizations, the Blue Cross and Blue Shield, or any other voluntary societies.

Resolution

WHEREAS, in its beginnings the American Medical

Association concerned itself exclusively with the development of the art and science of medicine, and

WHEREAS, the unequalled progress of the science of medicine in the United States can in a great degree be attributed to the efforts of the American Medical Association, and

WHEREAS, there was for many years no need for the American Medical Association to concern itself with the social and economic problems of the nation, and

WHEREAS, realizing that the situation had changed and that if the medical profession was to continue to insure to the people of the United States the very best in health and medical care, the American Medical Association would be compelled to exert its efforts not only toward the scientific development of medicine, but toward the solution of social and economic problems brought upon us in a great degree by social planners in our government, and

WHEREAS, the American Medical Association, recognizing its responsibility, has risen to the challenge and is now engaged in a national educational campaign designed to emphasize to the people of the nation and to Congress the destructive effects which any type of socialized medicine would produce in the health and medical care of the people; the great burden such a system would impose on the national economy and the taxpayer; and the ethical, moral, and scientific degeneration such systems invariably produced in the medical profession and the unfortunate effects upon the people in general.

NOW THEREFORE BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 56th Annual Meeting in Tulsa, Oklahoma, this 15th day of May, 1949, that the Oklahoma State Medical Association reaffirms its support of the educational program as announced by the American Medical Association and commends the American Medical Association, its officers, and the directors of the educational campaign for the plans which have been announced and for their untiring efforts which are now beginning to produce results, and

BE IT FURTHER RESOLVED that copies of this resolution shall be directed to the President of the American Medical Association, to its secretary and general manager, and to the Directors of its Educational Campaign.

Resolution

WHEREAS, the members of the Oklahoma State Medical Association, as a result of their close contact with the medical care problems of the people of the State of Oklahoma, and as a result of their knowledge of those problems are keenly aware of the demand and need for additional well-qualified and trained doctors of medicine in the State; and

WHEREAS, the present facilities of the Medical School of the University of Oklahoma are not adequate to train a greater number of physicians; and

WHEREAS, it is most apparent that the sixty-four students per year which it is now possible to admit to the Medical School will not in any case provide a sufficient number of trained graduates to even maintain the present inadequate ratio of doctors of medicine to population; and

WHEREAS, any increase in the number of students admitted to and graduated from the Medical School will require the provision of additional facilities for both the Medical School and the University Hospitals;

NOW THEREFORE BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 56th Annual Meeting in Tulsa, Okla-

homa, this 15th day of May, 1949, that the people of the State of Oklahoma, through the Oklahoma State Legislature are urged to provide sufficient funds for the Medical School to make possible annual graduation of a class of at least one hundred well-trained and qualified doctors of medicine.

Resolution

WHEREAS the Oklahoma Medical Research Foundation is now a reality due to the untiring efforts of the people of Oklahoma, and

WHEREAS, the Alumni Association of the Medical School of the University of Oklahoma has made such an outstanding contribution to the creation of the Foundation, and

WHEREAS, the medical profession fully recognizes the great benefits to mankind that will emanate from this institution in behalf of the people of the United States and the world,

NOW THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association again goes on record urging each and every physician in the Association to give their untiring efforts to the growth and promotion of the Oklahoma Medical Research Foundation.

Resolution

WHEREAS, continuing medical education of the Doctors of Medicine in the State of Oklahoma is to the ultimate benefit of all people of the State, and

WHEREAS, the Oklahoma State Medical Association has, for more than ten years, received the wholehearted aid and assistance of the Oklahoma State Health Department in the operation of its post-graduate training program, available to all Doctors of Medicine in the State, and

WHEREAS, the operation of this extensive post-graduate training program without the cooperation of the State Health Department would have been a great financial burden both on the Association and upon the individual doctors enrolled,

NOW THEREFORE BE IT RESOLVED, That the House of Delegates, at its 56th Annual Meeting in Tulsa, Oklahoma, this 15th day of May, 1949, express to the State Health Department its gratitude and commendation for its worthwhile participation in the post-graduate training program, and

BE IT FURTHER RESOLVED, That copies of this Resolution shall be directed to the Governor of the State, the Chairman of the State Board of Health, and to the Commissioner of Public Health.

Resolution

WHEREAS, the prevention of disease plays an important part in the health of the American people, and

WHEREAS, the value of well-directed, full-time Public Health Departments in disease prevention has been proved, and

WHEREAS, Oklahoma State Board of Health recognizes Public Health as a fundamental branch of medicine and gives its full cooperation to public health programs,

NOW, THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association urges each County and District Medical Society to assume community leadership in matters of public health and to lend full support to the successful operation of public health programs in the field of preventive medicine.

Resolution

WHEREAS, the Secretary of Defense has pointed out the need for 1,600 physicians by July, 1949, and 2,200 by December, 1949, and

WHEREAS, the Secretary of Defense has called upon physicians who were educated at Government expense and have not served in the armed forces at any time to volunteer for service, and

WHEREAS, the Armed Services have made every attempt to utilize the physician in a professional capacity, and

WHEREAS, the Secretary of Defense has set the quota for Oklahoma at twenty-four physicians as its quota of the 2,200 physicians needed,

NOW THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association endorses the request of the Secretary of Defense for voluntary enlistments of physicians educated at government expense, with the further request that all recruiting efforts of the military forces be first directed to those areas of Oklahoma where they can best be spared.

Resolution

WHEREAS, during the past year the Women's Auxiliary to Oklahoma State Medical Association has increased the number of its component County and District Auxiliaries from 12 to 32, and

WHEREAS, the officers and the members of the Auxiliary have given generously and tirelessly of their time and talents to support every project of Oklahoma State Medical Association, and

WHEREAS, the work of the Auxiliary membership in carrying out the plans of the American Medical Association National Education Campaign has been particularly outstanding, and

WHEREAS, the defeat of proposals for compulsory health insurance, which is the aim and objective of the National Education Campaign, will help to wipe out the creeping paralysis of Socialism in this country.

NOW THEREFORE BE IT RESOLVED, that Oklahoma State Medical Association express to the Woman's Auxiliary its appreciation for its invaluable service in the present critical period, not only to the profession of medicine, but also to all Americans who want their children to receive the same heritage of glorious freedom which was handed to us by our forefathers.

Resolution

WHEREAS, The National Physicians Committee for the Extension of Medical Care has performed a real and worthy service to the medical profession in the United States and to the people of the country as a whole in citing and publicizing the threats to our free enterprise system which are inherent in the proposals for compulsory health insurance which have repeatedly been introduced in Congress during the past ten years by Senators Wagner and Murray and Representative Dingell and others, and

WHEREAS, The Board of Directors of the National Physicians Committee announced on April 1, 1949 that the committee would cease all activities as of that date, inasmuch as the development of the National Educational Campaign of the American Medical Association represents the fulfillment of the aims toward, which the National Physicians Committee has been working, and

WHEREAS, two members of Oklahoma State Medical Association are among the physicians who served on the National Physicians Committee, Finis W. Ewing, M.D., and W. Jackson Sayles, M.D.,

NOW THEREFORE BE IT RESOLVED, That Oklahoma State Medical Association acknowledges with appreciation the accomplishments of the National Physicians Committee and the members thereof in bringing the issue of compulsory health insurance before the citizens of this country.

Resolution

WHEREAS, The Tulsa County Medical Society, in extending to the Oklahoma State Medical Association an invitation to hold its 56th Annual Meeting in Tulsa, Oklahoma, May 16th to 18th, incurred a great responsibility, and

WHEREAS, the Tulsa County Medical Society and its membership in acceptance of that responsibility, have graciously extended to the entire membership of the Oklahoma State Medical Association, its Women's Auxiliary, and their guests, a well-planned and executed scientific program and entertaining and enjoyable round of social events and their unparalleled hospitality,

NOW THEREFORE BE IT RESOLVED, That the Oklahoma State Medical Association hereby express to the Tulsa County Medical Society the gratitude of every member and guest for their delightful meeting in Tulsa as guests of the Tulsa County Medical Society.

Following the adoption of the above resolutions, Dr. Bell, Chairman of the Resolutions Committee, submitted the following resolution:

WHEREAS, under the present system, the members of the House of Delegates are not given an opportunity to review and study the program presented annually at the meeting of the House of Delegates,

NOW, THEREFORE, BE IT RESOLVED, That a typewritten copy of the program, including any and all changes contemplated in the rules, regulations, and edicts of the Oklahoma State Medical Association be mailed from the office of the Executive Secretary to the Secretary of each component County Medical Society ninety days before each forthcoming annual meeting.

/s/J. G. Edwards, M.D.

I. W. Bollinger, M.D.

Delegates, Okmulgee County Medical Society.

It was *moved* by the Chairman, Dr. Bell, *seconded* by H. A. Higgins, M.D., Ardmore, that the above resolution be approved. The motion *did not carry*.

Following the disapproval of the above resolution, Dr. Bell submitted a resolution from the Tulsa County Medical Society which advocated the initiating of a more aggressive program to combat government medical plans:

Resolution

WHEREAS, The enactment of compulsory governmental medical care legislation is favored by a substantial group of leaders of the political party presently in power in the United States Government; and

WHEREAS, The more informed people of the nation are aware of the dangers to which our form of government would be exposed were Federal compulsory medical insurance legislation enacted; and

WHEREAS, These thoughtful individuals agree that, even though present American medicine is the best in the world, there do exist serious deficiencies the chief of which are (1) lack of proper distribution of medical care, particularly to rural areas, (2) the costs of medical and hospital care, and (3) failure of a not inconsiderable number of physicians to furnish medical attendance at home and during the night; and

WHEREAS, The present activities of organized medicine in relation to correcting these deficiencies are limited to (1) the enunciation of the Twelve Point Program, admirable in intent and purpose but too abstract and futuristic to stand as a positive answer to the critical and urgent needs of these times, and (2) to the rapid expansion of Voluntary Health Care Plans; and

WHEREAS, This program is too limited and, in part, too abstract to meet the needs of organized medicine for immediate and positive action to correct present-day deficiencies; and

WHEREAS, This program is not stilling the voices of objection as shown by the numerous critical surveys being presented by responsible national and local publications, and even from outstanding members of the medical profession itself,

THEREFORE, BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association reaffirm its paramount interest in the necessity for the provision of a more implemented campaign of positive action than is presently being conducted; and

BE IT FURTHER RESOLVED, That the Oklahoma State Medical Association submit a demand to the American Medical Association that it develop the specification that every physician having completed one or two years of accredited internship be urged to practice for an appropriate period of time, as determined by a survey of the needs, in a rural community before he may be allowed to continue his residency training in any specialty; and

BE IT FURTHER RESOLVED, That the Oklahoma State Medical Association initiate measures to create a National Hospital Foundation to secure funds and support from voluntary sources in industry, commerce, banking and voluntary health agencies. These funds to be allocated as grants-in-aid to voluntary hospitals as required to help them meet the problems of decreasing income from endowments and investments, increased costs of operation and periods of inflation; and

BE IT FURTHER RESOLVED, That it be the unanimous expression of the House of Delegates that, in implementation of the present program of the American Medical Association, we insist that a more positive and concrete attack be made on the problems affecting our relations with the public today; and

BE IT FINALLY RESOLVED, That our representatives to the House of Delegates of the American Medical Association be instructed to submit this Resolution to the appropriate committee of that body as an expression of the deep concern that we have that the present program being carried out is too abstract and limited in its present scope to meet the complaints of the public, which complaints are being used by our opponents to force the beginning of a Socialist State upon us.

Dr. Bell, after reading the above resolution, commented on the extensiveness of the implications and moved that the resolution be referred to the Public Policy Committee, and requested discussion from the floor. After several suggested amendments which were lost due to want of seconds, it was *moved* by L. H. Ritzhaupt, M.D., Guthrie, and duly *seconded* that action upon the resolution be postponed to an indefinite time. The motion *passed*.*

The Speaker then stated that it was now the time previously agreed upon for the election of officers, but announced that it would be necessary to formally adopt the amendment to the By-Laws concerning redistricting, which was presented early in the afternoon session, in order to legalize election of councilors and vice-councilors from the new Councilor Districts. George H. Garrison M.D., Oklahoma City, *moved* that this amendment to the By-Laws be formally adopted. The motion was *seconded* by James Stevenson, M.D., Tulsa, and *passed unanimously*.

*See P. 42, pars. 4 & 5 for further information on resolution.

The Speaker then read the nominations as made in the first session of the House of Delegates, which were as follows: Ralph McGill, M.D., Tulsa, President-Elect; Violet Sturgeon, M.D., Hennessey, Vice-President; Lewis J. Moorman, M.D., Oklahoma City, Secretary-Treasurer. The following three nominations were made for Delegate and Alternate-Delegate to the American Medical Association: John Burton, M.D., Oklahoma City; Malcolm E. Phelps, M.D., El Reno; C. E. Northcutt, M.D., Ponca City.

It was moved by Eugene Arrendell, M.D., Ponca City, that Ralph McGill, M.D., Tulsa, be elected by *acclamation*. The motion was duly *seconded* and unanimously *carried*. Dr. McGill was elected President-Elect.

The Speaker then called for a motion regarding the office of Vice-President. It was moved by C. M. Hodgson, M.D., Kiugfisher, *seconded* by A. R. Sugg, M.D., Ada, that Violet Sturgeon, M.D., Hennessey, be elected by *acclamation*. The motion *carried* unanimously, and Dr. Sturgeon was elected Vice-President.

A motion was then called for regarding the office of Secretary-Treasurer. It was moved by R. Q. Goodwin, M.D., Oklahoma City, *seconded* by W. S. Larrabee, M.D., Tulsa, that Lewis J. Moorman, M.D., Oklahoma City, be elected by *acclamation*. The motion *carried* unanimously, and Dr. Moorman was elected Secretary-Treasurer.

The Speaker then stated that there were three nominees before the House of Delegates to be considered for the offices of Delegate and Alternate-Delegate to the A.M.A. By previous action of the House of Delegates the nominee receiving the second highest vote would be elected Alternate-Delegate. On the first ballot John F. Burton, M.D., Oklahoma City, was elected Delegate by a majority vote. A second ballot was taken to determine which of the remaining two candidates would become the alternate-delegate. Malcolm E. Phelps, M.D., El Reno, was elected.

It was then announced by the Speaker that the nominations for Councilors and Vice-Councilors for the newly-created districts would now be in order. The Speaker informed the House of Delegates that Districts 1, 4, 7, and 10 would carry a term of one year; Districts 2, 5, 8, 11 and 14, two years; Districts 3, 6, 9, 12, three years.

The Speaker next called for the nominations from the respective newly-created Councilor Districts and the nominations by Districts were as follows:

District 1: P. S. Anderson, M. D., Claremore, nominated the following: F. S. Etter, M.D., Bartlesville, Councilor; W. Jackson Sayles, M.D., Miami, Vice-Councilor. It was moved by V. K. Allen, M.D., Tulsa, *seconded* by W. A. Howard, M.D., Chelsea, that these men be elected by *acclamation*. The motion *carried*.

District 2: Eugene Arrendell, M.D., Ponca City, nominated the following: L. A. Mitchell, M.D., Stillwater, Councilor; J. W. Francis, M.D., Perry, Vice-Councilor. It was moved by H. A. Higgins, M.D., Ardmore, *seconded* by Bruce Hinson, M.D., Enid, that these men be elected by *acclamation*. The motion *carried*.

District 3: J. Wendell Mercer, M.D., Enid, nominated the following: Bruce Hinson, M.D., Enid, Councilor; C. M. Hodgson, M.D., Kiugfisher, Vice-Councilor. It was moved by L. H. Ritzhaupt, M.D., Guthrie, *seconded* by O. C. Standifer, M.D., Elk City, that these men be elected by *acclamation*. The motion *carried*.

District 4: E. A. McGrew, M.D., Beaver, nominated the following: D. B. Ensor, M.D., Alva, Councilor; O. C. Newman, M.D., Vice Councilor. It was moved by H. A. Higgins, M.D., Ardmore, *seconded* by L. B. Word, M.D., Bartlesville, that these men be elected by *acclamation*. The motion *carried*.

District 5: W. F. Bohlman, M.D., Watonga, nominated the following: O. C. Standifer, M.D., Elk City, Councilor; A. L. Johnson, M.D., El Reno, Vice-Councilor. It was moved by H. K. Speed, M.D., Sayre, *seconded* by A. R. Sugg, M.D., Ada, that these men be elected by *acclamation*. The motion *carried*.

District 6: Onis G. Hazel, M.D., Oklahoma City, nominated the following: R. Q. Goodwin, M.D., Oklahoma City, Councilor; W. W. Rucks, Jr., M.D., Oklahoma City, Vice-Councilor. It was moved by E. A. McGrew, M.D., Beaver, *seconded* by Bruce Hinson, M.D., Enid, that these men be elected by *acclamation*. The motion *carried*.

District 7: Claude Chambers, M.D., Seminole, nominated the following: Ned Burleson, M.D., Prague, Councilor. O. H. Cowart, M.D., Bristow, presented the name of W. T. Mayfield, M.D., Norman for Vice-Councilor. W. T. Mayfield, M.D., Norman, presented the name of O. H. Cowart, M.D., Bristow, for Vice-Councilor. Ballots were passed by the Tellers of Election and the name of W. T. Mayfield, M.D., Norman, was officially presented for Vice-Councilor. It was moved by Onis G. Hazel, M.D., Oklahoma City, *seconded* by L. G. Livingston, M.D., S.Cordell, that these men be elected by *acclamation*. The motion *carried*.

District 8: V. K. Allen, M.D., Tulsa, nominated the following: Maurice Searle, M.D., Tulsa, Councilor; W. S. Larrabee, M.D., Tulsa, Vice-Councilor. It was moved by H. H. Macumber, M.D., *seconded* by W. J. Sayles, M.D., Miami, that these men be elected by *acclamation*. The motion *carried*.

District 9: F. R. First, Jr., M.D., Checotah, nominated the following: Shade Neely, M.D., Muskogee, Councilor; F. R. First, Jr., M.D., Checotah, Vice-Councilor. It was moved by C. M. Hodgson, M.D., Kiugfisher, *seconded* by J. G. Edwards, M.D., Okmulgee, that these men be elected by *acclamation*. The motion *carried*.

District 10: L. C. Kuyrkeudall, M.D., McAlester, nominated the following: Earl Woodson, M.D., Poteau, Councilor; E. H. Shuller, M.D., McAlester, Vice Councilor. It was moved by J. Wendell Mercer, M.D., Enid, *seconded* by H. A. Higgins, M.D., Ardmore, that these men be elected by *acclamation*. The motion *carried*.

District 11: A. T. Baker, M.D., Durant, nominated the following: W. K. Haynie, M.D., Durant, Councilor; L. E. Gee, M.D., Broken Bow, Vice-Councilor. It was moved by Bruce Hinson, M.D., Enid, *seconded* by W. S. Larrabee, M.D., Tulsa, that these men be elected by *acclamation*. The motion *carried*.

District 12: E. D. Padberg, M.D., Ada, nominated the following: J. Hobson Veazey, M.D., Ardmore, Councilor; W. T. Gill, M.D., Ada, Vice-Councilor. It was moved by L. G. Livingston, M.D., Cordell, *seconded* by H. A. Higgins, M.D., Ardmore, that these men be elected by *acclamation*. The motion *carried*.

District 13: H. H. Macumber, M.D., Chickasha, nominated the following: J. L. Patterson, M.D., Duncan, Councilor; H. M. McClure, M.D., Chickasha, Vice-Councilor. It was moved by J. V. Athey, M.D., Bartlesville, *seconded* by W. Jackson Sayles, M.D., Miami, that these men be elected by *acclamation*. The motion *carried*.

District 14: James F. McMurry, M.D., Sentinel, nominated the following: L. G. Livingston, M.D., Cordell, Councilor; J. B. Hollis, M.D., Mangum, Vice-Councilor. It was moved by L. H. Ritzhaupt, M.D., Guthrie, *seconded* by H. A. Higgins, M.D., Ardmore, that these men be elected by *acclamation*. The motion *carried*.

Following the election the Speaker called for final action on Amendments to the By-Laws which were presented at the first session for the House of Delegates, and which had not yet been adopted.

W. J. Sayles, M.D., Miami, Chairman of the Committee on the Constitution and By-Laws, stated that all amendments that had previously been submitted had been approved by the Council with the exception of Chapter I, Section 3 (b) and (c), which had been disapproved by the Council, but that since it was his own personal amendment, he was bringing it before the House of Delegates for consideration. This amendment was as follows:

Chapter I—Membership

Section 3. Classification.

(b) Honorary Members

To be amended to read as follows: Line 11, after the word "session" and before the words "The approval" on Line 12, insert the following:

"provided, however, that any former member of the Association who, at the time his membership lapsed, had been an active member of the Association for five (5) years and who possesses the other qualifications for Honorary Membership, shall be eligible for election to Honorary Membership on presentation of his petition by the component society for the county in which he resides, if the petition for such physician is presented to the Executive Secretary before January 1, 1950. After the 1950 Annual session, Honorary Membership shall not be available under the terms of this proviso."

(c) Life Members

To be amended to read as follows: Line 14, after the word "session," and before the words "The approval" on Line 15, insert the following:

"provided, however, that any former member of the Association, who at the time his membership lapsed, had been an active member of the Association for five (5) years, and who possesses the other qualifications for Life Membership, shall be eligible for election to Life Membership on presentation of his petition by the component society of the county in which he resides, if the petition for such physician is presented to the Executive Secretary before January 1, 1950. After the 1950 Annual session, Life Membership shall not be available under the terms of this proviso."

A motion was made by Finis W. Ewing, M.D., Muskogee, that this amendment be disapproved. The motion was seconded by W. A. Howard, M.D., Chelsea, but did not carry.

After further discussion Dr. Sayles moved the adoption of the amendment which was duly seconded. This motion passed adopting the amendment.

All other proposed amendments to the By-Laws which had been presented at the first session were unanimously adopted by formal motion.

The Speaker then stated that he had a request for time from John Matt, M.D., of Tulsa. He then accorded Dr. Matt the floor. Dr. Matt spoke to the House of Delegates regarding the resolution to initiate a more aggressive program to combat governmental medical plans. It was Dr. Matt's feeling that the action of the House of Delegates in disapproving this resolution was hasty. Following Dr. Matt's remarks, lengthy discussion ensued, with no definite action taken, inasmuch as this resolution had been referred to the Public Policy Committee for study.

The Speaker of the House at this point pointed out that the House had previously postponed definite action on the resolution, but recommended that should the public policy committee elect to do so, it might well study the implications of the resolution in line with its future programs.

Newly-elected officers were then requested to stand and be escorted to the front. Lewis J. Moorman, M.D., Oklahoma City, Secretary-Treasurer, was absent. Ralph

McGill, M.D., Tulsa, President-Elect, came to the speaker's stand and said:

"Mr. Speaker and Friends: I wish to take this opportunity to thank each and everyone of you from the depths of my heart for this honor. I have been a member of this Association almost 25 years. Ever since attending the first meeting, I have always thought it would be a great honor to be president. As I walked down this aisle a moment ago the responsibility of this office was foremost in my mind. We are all aware of the crucial moment which we are facing in the practice of medicine today. This is the zero hour. It behooves each of us to do all we can to combat these forces that would destroy our present practice of medicine. I know you look to your officers as leaders. They can only do a small amount. They can only help in a small way. It is up to you to help them.

"As I stand here with my knees knocking together, I feel very humble. As I reflect and think of all the men who have held this office during my time, realizing their high caliber and knowing that they have been chosen for their outstanding ability and contributions to medicine and also as leaders, it makes me wonder seriously if I can measure up to their standard which they have set. As we go along, I hope that when it comes time for me to take over that I shall receive the same spirit of loyalty and cooperation from you that each of you have extended to them, and I sincerely hope that I will be able to conduct the office in such a manner as to merit the confidence you have placed in me by electing me to this office."

H. Violet Sturgeon, M.D., Hennessey, Vice-President, said:

"I am deeply appreciative of the honor that you have given me because I am a woman, the first woman you have elected to office, and you have seen fit to repeat that election. I know that you already know that my heart is with the country people, that I think our big health problem is our rural problem. I feel deeply that organized medicine is not taking a positive enough stand, that we are too satisfied to say that we are opposed to what is being presented, that we are not being constructive in our attitude, that we should present some constructive program of our own as opposing the program that is offered. I thank you again for the definite honor that you have given me."

John Burton, M.D., Oklahoma City, Delegate to A.M.A., said:

"I humbly thank you for the honor. You may be assured that I will endeavor to carry out the wishes of this House of Delegates to the best of my ability. I will see that whatever is proposed by this House of Delegates and our profession is presented to the American Medical Association's House of Delegates in as effective a way as possible."

Onis Hazel, M.D., Oklahoma City, was recognized and said: "As a closing resolution I would like to propose that the House of Delegates express its appreciation to C. E. Northcutt, M.D., for the fine leadership that he has given and his challenge, that we might overcome criticism of ourselves and our profession. I feel that we should express our special appreciation to him for his fine service that he has given our Society this past year." Dr. Hazel's recommendation was heartily and unanimously approved.

The business of the 1949 meeting of the House of Delegates having been completed, the Speaker of the House declared the meeting adjourned at 9:30 P.M.

Respectfully submitted,

L. Chester McHenry, M.D.

Speaker of the House of Delegates

Reported by: Elaine Marshall



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Nearly 13,000 World War II veterans are studying pharmacy in colleges and universities under the GI Bill and Public Law 16. Another 622 are training in related fields, such as drug store management and chemical products manufacturing.

About 7,227,000 National Service Life Insurance policies, held by World War II veterans, were in force in late spring, Veterans Administration said. The policies represented \$41.6 billion of insurance protection.

Less than one-fourth of the World War II veterans holding National Service Life Insurance have converted their policies from term insurance to one or more of the half-dozen available permanent plans, Veterans Administration disclosed.

More than 202,000 World War II veterans by June 1 had either exhausted their entitlement to G.I. Bill training, or had completed their Public Law 16 training and were declared rehabilitated, Veterans Administration said.

The number of World War II veterans training on-the-job under the G.I. Bill and Public Law 16 dropped to 403,135 on June 1 — a 45 percent decrease from the 720,510 peak reached in January, 1947.

World War II veterans between 25 and 34 years of age had a median income of \$2,401 in 1947, compared with \$2,585 for non-veterans in the same age group, according to a Census Bureau study.

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WILLARD M. ALLEN, M.D., OBSTETRICS AND GYNECOLOGY. Professor and Head of the Department of Obstetrics and Gynecology, Washington University School of Medicine, St. Louis, Missouri

JOSEPH S. D'ANTONI, M.D., MEDICINE. Professor of Clinical Tropical Medicine, University of Tulane, Senior Visiting Physician, Charity Hospital, New Orleans, Louisiana

RALPH K. GHORMLEY, M.D., ORTHOPEDIC SURGERY. Professor of Orthopedic Surgery, Mayo Foundation, Graduate School of the University of Minnesota, Rochester, Minnesota.

HORACE L. HODES, M.D., PEDIATRICS. Associate Professor of Pediatrics, Johns Hopkins School of Medicine and Medical Director, Sydenham Hospital, Baltimore, Maryland

JOHN F. HOLT, M.D., ROENTGENOLOGY. Associate Professor of Roentgenology, University of Michigan School of Medicine, Ann Arbor, Michigan

M. DIGBY LEIGH, M.D., ANESTHESIOLOGY. Director, Department of Anesthesiology, Vancouver General Hospital, Vancouver, B.C., Canada

FRANCIS M. LYNCH, M.D., DERMATOLOGY. Clinical Professor, Division of Dermatology, University of Minnesota School of Medicine, Minneapolis, Minnesota.

CARL A. MOYER, M.D., Professor of Experimental Surgery, Southwestern Medical College of the Southwestern Medical Foundation, Dallas, Texas

LOUIS H. NEWBURGH, M.D., INTERNAL MEDICINE. Professor of Clinical Investigation, University of Michigan School of Medicine, Ann Arbor, Michigan

JOHN PARKS, M.D., OBSTETRICS AND GYNECOLOGY. Professor of Obstetrics and Gynecology, George Washington University School of Medicine, Washington, D.C.

DALTON K. ROSE, M.D., UROLOGY. Professor of Clinical Genito-Urinary Surgery, Washington University School of Medicine, St. Louis, Missouri

ARNO E. TOWN, M.D., OPHTHALMOLOGY. Professor of Ophthalmology, Jefferson Medical College, Philadelphia, Pennsylvania

JAMES ROSS VEAL, M.D., SURGERY. Associate Professor of Surgery, Georgetown University School of Medicine, Washington, D.C.

JOSEPH B. VANDER VEER, M.D., INTERNAL MEDICINE. Assistant Professor of Clinical Medicine, University of Pennsylvania School of Medicine, and Assistant Professor of Cardiology, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

MEDICAL ASSISTANTS

The Medical Assistants Society will hold its annual session at the Skirvin Hotel October 22 and 23.

This organization has manifested a loyal interest in the advancement of approved professional principles and its members are in a position to forward the proper patient-physician relationship. Supplementing this relationship in a changing world, they can do much toward bridging the chasm which has arisen between the patient and his physician. It is to be hoped that in spite of the absorbing demands of scientific progress they can help restore the losses resulting from our current neglect of the art of medicine. It would seem wise for all physicians to encourage membership in this organization and attendance at the Annual Meeting.

CONGRATULATIONS

The officers of The Indiana State Medical Association have sent out engraved gold seal invitations to attend the one hundredth birthday of this honored organization. The meeting convened in Indianapolis September 26, 27, 28 and 29. This was a great occasion in Indiana. Youthful Oklahoma respectfully conveys good wishes and humbly extends hearty congratulations. Long live the profession of Indiana.

LEST WE FORGET

Long, long ago a Chinese philosopher said, "When ill do nothing but look after yourself, and you will be acting toward yourself, as a doctor of medium training and moderate ability."

Hippocrates said, "The sick might conquer his disease with the help of the physician."

John Locke, physician-philosopher said, "You cannot imagine how far a little observation carefully made will carry a man in the curing of diseases though very stubborn and dangerous, and that with very little and common and almost no medicine at all."

THE OKLAHOMA CITY CLINICAL SOCIETY

The Nineteenth Annual Session of the Oklahoma City Clinical Society, October 24-25-26-27, 1949, has been announced.

The distinguished guest roster lists outstanding lecturers from the four corners of the nation. How fortunate that busy practitioners can have the best brought to his own bailiwick. Forward looking physicians everywhere know the necessity of postgraduate work in this day of rapid medical progress. Oklahoma City Clinical Society may expect a full attendance at this 19th session with its exceptional record of 18 years to recommend it.

BEHIND THE IRON CONSTITUTION

Of all the people in the United States the physicians with their hardy background, their capacity for work, their established facility for the punishment of hard work, their intellectual attainments and their scientific slant upon social and medical needs, should have the guts to stand four square against the false ideologies of the presumptuous so-called Fair Dealers, still New Dealers in disguise, forcing a fine word into an unfair position.

All well informed physicians know that no good can come from nationalized medicine fortified by carefully screened controls and they should take a firm stand for the truth established by their well trained five senses even to the point of death. For the sake of truth Socrates died like a scientist. The alternative of becoming an exile did not satisfy his conscience so he took the hemlock and strange as it may seem, in that early day of medical science, he employed his last breath to pay tribute to the physicians of his time. After twenty-five centuries of progress in science shall we be found wanting in the Socratic courage necessary to save that science. The majority of the physicians and nurses and the intellectual people of the British Commonwealth are now regretting that the members of the British Medical Association did not hold out against

submission to the National Health Act in keeping with their best judgment as expressed in their original vote. They compromised and yielded to promises with the faint hope that by some miracle, bureaucracy might be humanized by their generous gesture in behalf of national harmony.

In America, physicians are in position to demonstrate their love of the people through the legitimate exercise of the power of possession. Neither Mr. Truman nor Mr. Ewing with the help of all bureaucrats in Washington, have the knowledge and the power to establish even a diluted national medical service without the consent and cooperation of the medical profession. Having successfully guarded the health of the nation since the constitution was signed, shall the physicians desert the people at this critical time when the bureaucrats are bent upon the leveling process at the expense of personal liberty, individual initiative, incentive for creative endeavor and the accumulation of reasonable wealth. With all this underway shall the medical profession join the destructive forces and sacrifice the nation's health at the cost of a tremendous sum, to both people and profession, in dollars and cents. While the bureaucrats undermine the foundations of our democratic government let the medical profession continue to protect the people by refusing to give the green light.

THEY KNOW NOT WHAT THEY DO

Apparently most bureaucrats have immature minds and the world has learned that immature minds in grown up bodies are dangerous. They may not facilitate the work of the devil by design but they seem unaware of the fact that he often rides to the kill on the backs of misguided "do-gooders." Thus, any government may be dispoiled by the people who provide government by the vote and fail to let those elected to office know what they believe in and what they want.

But ambitious bureaucrats, even with the voters' consent, cannot practice medicine without doctors. Physicians in possession of the necessary knowledge and skills and a clear understanding of the disastrous implications of socialized medicine should withhold their services in behalf of the people and pray for the bureaucrats on the ground that "they know not what they do."

Occasionally drastic measures are necessary to dislodge the devils mounted on the

backs of evil "do-gooders." With ultimate good in mind our profession must not yield to honeycoated bunk as did our British professional brothers who now grovel in the grime of failure. Even at the expense of seeming obstinacy we must employ our humane judgment in behalf of national weal. Were not the American soldiers in Brittany using the posts that supported the crossroads crucifixes to support their telephone wires though laden with lethal messages really in the service of God?

Whether we go the way of Gibbon's Rome or whether we survive to vindicate conservative democracy we will be right. With Henry Clay we would rather be right than president especially when the president is wrong.

ANTIVIVISECTIONISTS TAKE NOTICE

In the great war memorial on the precipitous castle rock in Euburgh among the bronzes and plaques there is one to canaries, rats, and mice because through their service in the tests for poisonous gasses they saved innumerable lives. Even so, the hazards they were subjected to were less dangerous than those faced by the average troops in combat.

All those who love their nice dogs and cats should slow down their animosity toward mice and rats.

Until this is accomplished let no man declare that research workers should be robbed of the privilege of the merciful use of animals in the pursuit of medical science which represents the highest expression of mercy in behalf of all animal life including that of man. The chapter dealing with the beneficent influence of animal experimentation upon the dumb creatures' own earthly existence has not been written. When it is, if well done, the antivivisectionists will blush with shame or continue to blubber their protests from the depths of their unreasonable ignorance.

Long since many of the vivisectionists would have been eliminated by disease if longevity had not been doubled in the U. S. by the knowledge gained through animal experimentation. Those who would like to live long enough to really enjoy the mellow companionship and affection of dogs and cats should vigorously oppose any laws that seek to prohibit animal experimentation. Even a dog's life may be dependent upon the scientist's knife.

We say to all antivivisectionists, cheer up, change your mind, and be merciful.

LIBERTY OR DEATH

After a careful consideration of medical service under the National Health Act in Great Britain and a few weeks sojourn in England and Scotland with professional and lay contacts affording comprehensive coverage, the writer is convinced that medicine in Great Britain has suffered an irreparable blow and both the people and the profession have become innocent victims of a despicable form of serfdom. If the members of the British Medical Association had followed the mandates of conscience and exercised their prerogative in behalf of freedom by refusing to cooperate, this annulling and degrading situation might have been avoided.

In America we are still free but perennially the politicians playing for power seek to straddle upon us the same form of slavery.

Our freedom is based upon the gift of reason; this gift sets us apart from all animals and is not accounted for by the students of evolution; it is a God given freedom with no controls except the exercise of conscience and any plan for the people's health not based upon the judgment of physicians is an insult to human intelligence and is in conflict with the Creator's design for the progress of mankind.

Mr. Ewing's prescription for the health of the nation is as naively presumptuous as Mother Eddy's obsession that she came to complete the unfinished mission of Jesus Christ.

With the knowledge of what has happened to other countries coming under the orgy of socialized medicine and with Britain's plight fresh before our eyes we should place our hopes upon the altar of reason and solemnly swear before the god of freedom that we shall resist the curse of nationalized medicine to the very last ditch with all the austerity left in our distraught souls. Regardless of pressure groups and the popular opinion, God help us to say no. We may rest assured that once the bureaucratic rats find a hole they will crawl in, chew up the cheese and leave their offal in the cubbard.

THE COUNCIL

In spite of politics, hell and high water, the medical profession holds. On Sunday, August 21, while throughout the commonwealth the people were gathered in the churches for the salvation of their souls, the members of the council and their alternates from the four corners of the state were converging on the Association's headquarters in the interest of their bodies. These members of the people's profession having left all their personal interests behind gather in council on public weal. Sitting in church could not be more inspiring. No preacher could do more for the flock. Literally, these men have left the ninety and nine in behalf of the lost lamb.

For hours these unselfish champions of the people's health deliberated without a single sordid note. They were bent upon the formulation of policies and the projection of plans in behalf of the people. Though seemingly unaware of the true meaning of their high calling they were plumbing the Golden Rule, and practicing the principles of The Great Physician.

"LITTLE DAVID"

The medical profession with its well filled pouch of time tried pebbles should march up and swing its sling in the face of the bureaucratic Goliath who dares to threaten the destruction of a service faithfully performed. An aroused medical profession with well polished pebbles can bring down the boldest bureaucrat.

Though the immediate threat has passed we can expect no surcease. It's time to sing, "little David come swing your sling and save your people".

General Patton has said, "Throughout the ages wars have been lost by not crossing rivers".

General Robert E. Lee said at Chancellorsville, "I was too weak to defend so I attacked."

OKLAHOMA CITY CLINICAL SOCIETY

Biltmore Hotel

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Oklahoma City

SCIENTIFIC ARTICLES

NEWER CONCEPTS OF EPILEPSY*

ROBERT A. HAYNE, M.D.

AND

TOM R. TURNER, M.D.

TULSA, OKLAHOMA

Epilepsy, a condition characterized by recurrent seizures of various types associated with loss of consciousness and accompanied by evidence of abnormal electric discharge from the cortex, can be either idiopathic or symptomatic. The latter is secondary to many demonstrable morphological alterations in the brain which, somehow or other, disturb the normal physiology of the structure so as to be productive of the abnormality. In the idiopathic type, although there is unquestionably an aberration in the physiology of the brain, this has not as yet been discovered.

Seizures may be roughly classified into three groups: grand mal, petit mal, and psychomotor; these differing in their pathological physiology as is evidenced by the character of the seizure, their response to medication, and the alteration in the normal pattern of the electroencephalogram.

Thus, in the grand mal type there is, with or without an aura, a generalized tonic clonic convulsion, this being, however, in some instances of the symptomatic type, confined to one portion of the body or spreading from one area to involve others—the so-called Jacksonian type of seizure. This is characterized in the electroencephalogram by rapid spike discharges from the cortex in the tonic phase this being followed by a slowing and decrease of the amplitude of the waves in the so-called post-convulsive stupor. The interseizure electroencephalograph may or may not be abnormal, the abnormality when present being characterized by slowing of the normal wave pattern of the cortex, which in the adult is 8-12/second, together with isolated spikes which are negative electrically. Grand mal seizures respond well to Dilantin and Phenobarbital in

adequate doses, and are aggravated by Tridione.

Petit mal seizures occur more frequently in children and are clinically manifested by a loss of consciousness associated with a stare and, in many instances, a 3/second jerking of the head and upper extremities. Electroencephalographically, the seizure is represented by a three/second spike and slow waves, which in so-called petit mal variant may show less regularity of the frequency, with the latter being in some instances somewhat slower and in others slightly faster. Characteristically, these seizures have a simultaneous onset in various parts of the cortex and may in some instances be of symptomatic nature, in which case, the onset may be in a specific area of the cortex and spread to the other regions. The interseizure record again is frequently abnormal, showing usually a slowing of the normal frequency with isolated spike and wave discharges. This type of disorder responds well to Tridione and is, in many instances, aggravated by Sodium Dilantin.

Psychomotor seizures are represented by transient loss of consciousness in which the patient carries out well coordinated but unusual motor activity. These individuals, for example, will frequently pick at their clothing, undress themselves, and in many instances are destructive during an attack. The important thing characterizing these attacks clinically is that the activity is unusual, paroxysmal, and the patient has amnesia for the attack. These individuals frequently also have grand mal seizures. It is important to elicit the history of the psychomotor seizures from the relatives or close associates of the patient by direct questioning, or it will not be obtained. The seizures are characterized on the electro-

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encephalogram by six second waves of large amplitude with intermittent four/second flat topped waves, the latter being, in reality, electrical discharges of a positive electrical sign. These seizures are frequently aggravated by Phenobarbital and bromides, and respond poorly to all anticonvulsant medications.

Both petit mal and psychomotor seizures may be associated with grand mal attacks. Petit mal and psychomotor seizures in the same patient are extremely rare. All of the above types may be of a symptomatic nature.

It becomes immediately apparent that there are two major problems to be solved. 1. What is the nature of the pathological physiology of these seizures? 2. Where in the central nervous system, do they arise? Unfortunately, relatively little is known pertaining to either of these problems, but we might discuss some of the facts which are known at the present time.

If one places a solution of dilute strychnine on the cortex, there is produced an abnormally large discharge of neurons, presumably through the action of the drug inhibiting the decomposition of acetylcholine and which will be represented on the electroencephalogram by a negative discharge of electricity which is manifested by an upward deflection of the ink writer. Likewise, a focus of the cortex when productive of epileptic seizures produces a similar negative deflection, so that it might be concluded that such seizures are produced by an abnormally large neuronal activity. Such activity is followed by a positive electrical discharge and a decrease in the pH of the cortex. The area is also increased in its threshold to stimulation following the abnormal discharge. It has also been shown that lack of CO₂ increases the susceptibility of the neurons to epileptic discharges and that such seizures are associated with an increase in the blood flow through the particular area.

These data all represent changes which are productive of, or are produced by the seizure and do not represent information regarding the intrinsic disorder of the neuron which makes it susceptible to production of an epileptic discharge.

Recent work has elucidated somewhat the problem regarding the area or areas in the central nervous system which are abnormal and from which an epileptic seizure originates. Thus, Erna Gibbs, Bartholomew Fus-

ter, and Fred Gibbs have shown that, in psychomotor epileptics, the only areas on the outer surface of the cortex from which negative spike discharges may arise are the temporal lobes on one side, or less frequently, both sides, and usually in the superior temporal gyrus in its posterior aspect. They feel that the abnormality in the electroencephalogram represented in all other areas of the cortex is the result of spread of the abnormal electrical activity from the negative spike focus in the temporal lobes. This activity, you will recall, is predominantly a positive electrical discharge which physiologically can be shown to represent the electrical sign produced by spread of electrical activity from an active area.

Up to the present time, these authors, in conjunction with Percival Bailey, have excised the area of abnormal negative spikes in the temporal lobes in somewhat over 20 patients with encouraging results. It is too early for an accurate evaluation of the procedure, but thus far there has been improvement evident both in the frequency of the grand mal seizures in cases in which these are present as well as improvement in the psychomotor attacks. There has also been a decided improvement evident in the bad behavior which characterizes many of these patients. In several instances, at operation, pathological alteration was evident in the temporal area, either obvious gliosis and fibrosis or, in at least two instances, neoplastic involvement. This work has, incidentally, cast light on the temporal lobes in so far as the so-called psychic function is concerned.

The question next arises as to whether the various subcortical areas may be implicated in representing foci from which epileptic seizure discharges may arise and spread to the remainder of the brain. In an attempt to elucidate this problem, one of us (RAH), in conjunction with Fred Gibbs, Louis Belinson, Russell Meyers, and John Knott, placed pickup electrodes in various parts of the corpus striatum and thalamus in patients suffering from severe epilepsy of various types. Such recordings have been made in 28 patients from one or both sides. These recordings have been shown that in the interseizure records there are evident negative electrical discharges characteristic of epileptic foci in the caudate nucleus, putamen and medial and ventral nuclei of the thalamus. This has been shown to be true in all three types of seizure discharge, idiopathic

as well as symptomatic. In several instances, negative spike discharges were evident in one of these subcortical structures with the surface electrodes in the frontal, parietal, and occipital areas showing no evidence of spike discharges.

Of particular interest was one grand mal epileptic, the seizures being secondary to a traumatized frontal lobe. In this case, the caudate nucleus and putamen on the ipsilateral side showed as severe a negative spike activity as the cortex adjacent to the scarred area. The abnormal activity in the putamen and caudate nucleus was not altered by removal of the cortical areas from which abnormal discharges were emanating.

This is, perhaps, of importance in the understanding of the failure of cortical excision in relieving post-traumatic epileptic seizures except in a relatively small percentage of cases.

In summary, it may be said that the pathological physiology productive of epileptic seizures is unknown. The area of abnormal activity from which a seizure may arise may be in either the cortex or in subcortical areas.

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INTRA-VENTRICULAR BRAIN TUMORS*

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Clinical, electroencephalographic and more recent radioactive isotope methods of diagnosis of brain tumors may be adequate in individual cases. Radiographically, plain films of the skull afford evidence of erosive, destructive or proliferative changes of the vault, resulting from increased intracranial pressure or direct extension of the lesion to bone. If the tumor contains calcium, localization on the routine films can be conclusive. If there is calcification of the pineal or choroid plexuses, displacement of the calcium shadows is indicative of the presence of pathology. Cerebral angiography may demonstrate a gross lesion in the brain because of distortion and displacement of the vessels produced. However, for a decisive diagnosis and accurate localization, cerebral pneumography is the procedure of choice. Small lesions in the brain may be overlooked unless quite close to the ventricular system, but larger lesions cause a displacement, asymmetry or block of the system, which leaves little doubt as to the presence of pathology. However, the nature of this pathology and exact localization may be somewhat more of a problem. On the other hand, the intra-ventricular tumors arising in or projecting into the ventricle, if well

outlined, offer little difficulty. Removal of these tumors is of vital interest to the patient, since many are benign and even malignant ones can sometimes be adequately extirpated, thereby justifying a good prognosis.

LATERAL VENTRICLES

The lateral ventricles are large cavities which when well filled with air make visualization of soft tissue masses quite simple. The most common tumors are ependymomas arising from the ependyma; others originate in the choroid plexus or the parenchyma surrounding the ventricles. A metastatic carcinoma may project in varying degrees within the ventricle.

Variations from the normal seen on the pneumogram depend on the size and location of the tumor. Small lesions may be visualized without associated abnormalities. Larger tumors will result in a deformity and enlargement of the ipsilateral ventricle and a displacement of the midline structures toward the contra-lateral ventricle. A midline tumor obstructing the foramen of Monro causes a bilateral hydrocephalus. If there is a block of the inter-ventricular foramen on one side the following will occur. The ventricle on the side involved will enlarge and displace the opposite ventricle. The sep-

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tum pellucidum assumes a curvature due to the increased pressure and there is little or no egress of air from the dilated ventricle to the smaller ventricle. The latter findings are not always present since in about 50 percent of individuals there is an acquired or congenital defect in the septum, which will permit flow of air into the uninvolved ventricle.

A tumor of the so-called fifth ventricle (the potential or actual space between the folds of the septum pellucidum) is in reality a mid-line lesion and causes a dilatation and separation of the lateral ventricles. If large enough it may encroach on the roof of the third ventricle.

THIRD VENTRICLE

The third ventricle is a midline cavity, whose width varies from 2 - 8 mm. and whose vertical diameter averages more than 2 cm. Intraventricular neoplasms result in deformity or distortion, enlargement, obliteration in whole or in part and obliquity of position of the ventricle. A large tumor encroaching on the foramen of Monroe results in a symmetrical or assymetrical dilatation of the lateral ventricles, if the block is complete. If the block is incomplete then a marked dilatation of one ventricle results with displacement of the midline structures and opposite ventricle which may be only slightly dilated. The lesion may obstruct the aqueduct of Sylvius. Then there is in addition a marked dilation of the third ventricle. On encephalography there is no air cephalad to the block; on ventriculography none caudad.

Many tumors of the third ventricle are congenital, benign or cystic. The colloid cyst arises from the anterior portion, giving rise to an anterior, smooth filling defect and hydrocephalus. Its margin may be straight or concave. Tumors arising from the thalamus produce hydrocephalus of the lateral ventricles and encroach on the third ventricle so that it is irregular and diminished in size. Pressure of the tumor may result in a displacement so that it assumes an oblique position.

Pinealoma, though not a true intraventricular tumor, may be considered here. It is visualized as a definite soft tissue mass which sometimes contains calcium, in the posterior third of the third ventricle. The convex outline of the mass is anterior. If large enough it is quite apt to block the aqueduct of Sylvius.

FOURTH VENTRICLE

Tumors in the fourth ventricle large enough to obliterate the ventricle or to block the aqueduct cause a hydrocephalus and a widening of the aqueduct. The tumor may occupy one side of the ventricle. If it is visualized then a posterior fossa lesion outside the cavity is easily ruled out.

SUMMARY

Cerebral pneumography is the one decisive roentgen procedure in diagnosis of brain tumors. Especially is the method of value in intra-ventricular lesions. This is fortunate since many intraventricular tumors are benign and even if malignant may occasionally be entirely removed, thus permitting a good prognosis.

THE TREATMENT OF HERPES ZOSTER*

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Herpes zoster, commonly known as shingles, is an acute disease of the skin characterized by groups of vesicles on an inflammatory base. It is caused by lymphocytic infiltration and occasionally hemorrhage and necrosis. The eruption is usually unilateral, localized to one dorsal segment and not recurrent, but occasionally it may be generalized, bilateral and recurrent. It is more

frequent in those who are ill or overworked. The eruption may be preceded or accompanied by itching, malaise or neuralgic pains over the affected area. The groups of vesicles develop over a period of several days but may take two weeks. Then the older vesicles tend to dry up, become covered with a yellowish brown crust and after a week or 10 days the crust falls off, leaving a temporary pigmentation or hyperemia. If gangrene or pyogenic infection occurs in the affected area ulceration with scarring

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will ensue. The average duration of the disease is from 10 days to three weeks. One attack usually confers immunity. The most common locations of herpes zoster are the intercostal nerves, the trigeminal nerves, particularly the first branch which produces herpes zoster ophthalmicus and the sensory nerves of the extremities. In children the disease almost always runs a mild course and sequelæ are rare, but in older individuals, particularly those over 50 years of age, minor skin lesions may be accompanied by severe excruciating pains that may last from months to years. This sequela is called post herpetic neuralgia.

There are two types of herpes zoster. The first and most common is the essential or primary idiopathic type which is caused by the virus invading the posterior root ganglion. The second or symptomatic herpes zoster is associated with some predisposing cause which through damage or irritation of the ganglion can precipitate an attack. The injury to the ganglion may activate the dormant virus or may upset the balance of host immunity and local resistance. Some of these predisposing factors are drugs, particularly arsenic, but also bismuth, lead, mercury, iodide, gold, morphine, carbon dioxide and carbon monoxide; blood dyscrasias such as leukemias; traumatic injuries; infectious diseases such as syphilis, tuberculosis, influenza, encephalitis; Hodgkins disease and tumors which act by pressure on the ganglion. The treatment for both types is the same since both run a similar course and respond to the same measures. However, in the symptomatic type, treatment is also given to the predisposing cause since this will remain after the acute eruption has disappeared.

Many types of therapy are recommended for the treatment of herpes zoster. It is difficult to evaluate treatment for the disease varies in the severity and duration of the pain, the site and destructiveness of the local lesions, the age of the patient and individual resistance. Treatment given each case is dependent on the location, the type of eruption and the amount of pain.

The simplest treatments are topical applications which are used to protect the skin from irritation, friction and infection. In the early stages dusting powders covered with thick cotton pads to prevent cutaneous stimuli will offer relief. A useful powder is one composed of equal parts of boric acid, talcum and zinc oxide with one fourth to

one percent menthol or camphor. For the acute vesicular stage calamine lotion with one percent phenol or a lime water-olive oil liniment containing equal parts zinc oxide, starch and talcum with some anti-pruritic is effective. Protective coatings are useful and one of the best is flexible collodian containing three to 10 percent ichthyol which is applied daily. Fox¹ relieved patients by spraying on a coat of paraffin daily after removing the coat applied the day before. Most of the patients require two to six treatments for if treatment is discontinued too soon the pain recurs. The protective coatings lessen local irritation of the inflamed areas and may curb the reflex arc of pain and hyperesthesia, but do not relieve the pain of post herpetic neuralgia. In the drying up stage, when crusts are present, mild ointments, such as boric acid, vaseline or lanolin, may help involution. Analgesics are beneficial in controlling moderate pain. Salicylates, phenacitin and barbiturates are the most commonly used. Although codeine and morphine are useful in cases with severe pain, they are not recommended due to their habit forming qualities. Heating pads, infra red lamp over the affected ganglion and ultra violet treatments are helpful in relieving the pain and drying up the vesicular eruption. Ethyl chloride spray over the eruption and the site of the affected ganglion may be beneficial. A one percent procaine hydrochloride ointment will aid some cases but it is not useful in the majority where local applications are all that is necessary. For secondary infection a 1:4000 potassium permanganate soak can be used or a two percent gentian violet solution.

The above measures will be all that is necessary in the majority of cases of herpes zoster where the eruption does not interfere with the patient's activities and where there are no complications. The following measures are advocated for the more serious cases having intractable pain and a protracted course. Treatment in these cases is aimed at ameliorating the inflammatory process in the posterior ganglion.

Pituitrin has been a useful drug since it was introduced in 1930 by Sidlich². Using 0.5-1.0 c.c. intramuscularly every 24 hours he was able to relieve most of his patients after one to two injections although some required three to six injections. Pituitrin is effective in those cases complaining of a sharp, stabbing, shooting or aching pain

involving the affected segment but not in those complaining of a burning, itching, stinging sensation localized to the site of the eruption. Either surgical or obstetrical pituitrin can be used and the earlier pituitrin is used the better the results. Post herpetic neuralgia does not respond to this treatment. Pituitrin acts by causing vasoconstriction and should not be given in pregnancy, cardio-vascular cases or those having increased intracranial pressure.

Sodium iodide today is one of the most widely used drugs in the treatment of zoster. One gram of sodium iodide is injected intravenously on the first day and two grams on the second, fourth and seventh day. Pain is lessened, the vesicles tend to dry up and the disease runs its course in 2-17 days. Dangers in using this drug are iodine intoxication, iodine allergy and iododerma.

Thiamine chloride has also proved effective in lessening the pain in herpes zoster. Used by itself thiamine chloride does not give much relief but when it is used in combination with some other treatment for herpes, particularly in conjunction with sodium iodide, there is more easing of the pain and the herpetic eruption becomes paler. Thiamine chloride can be administered by mouth, 50 mgms. t.i.d., hypodermically or subcutaneously into the site of the eruption.

Autohemotherapy, a form of foreign protein therapy, is successful at times. Five to 10 ccs. of the blood are withdrawn from the anti-cubital vein and injected into the gluteal muscles every second, third or fourth day. Pain is relieved in 24 hours and the eruption responds more slowly. Best results are obtained in early cases and this treatment is not beneficial in cases of post herpetic neuralgia. The British have been successful in injecting whole blood beneath the eruption and about the corresponding posterior root ganglion.

Cobra venom intramuscularly is used to relieve intense pain. Macht³, who did much work on this drug, believes it is not a local anesthetic but works upon the nerve centers of the brain. The analgesia produced is slow in onset and several daily injections are necessary to produce the desired effect. The duration of the analgesia is longer than that produced by other drugs. Large doses paralyze the respiratory centers so it should not be given to those with respiratory diseases. The average dose is five mouse units daily but it may be increased to 10 or 15

units. As soon as relief is obtained the frequency of administration is decreased. Cobra venom is not habit forming.

Local anesthesia will relieve local pain and the duration of relief obtained will depend upon the type of anesthesia used. A one-half to two percent novacaine solution injected into the area of hyperesthesia will relieve the pain in most patients for from one to 30 hours. An anesthetic-oil preparation such as Hollanders formula (Benzyl alcohol five percent, Ethyl Aminobenzoate three percent, Phenol one percent, Oil of sweet almonds q.s.ad. 100) or a modified Hollander's formula (Benzyl alcohol 10 percent, Benzocaine three percent, Phenol one percent, Oil of sweet almonds q.s.ad. 100) may relieve the pain for as long as four weeks. The latter in the course of the disease local anesthesia is used the less effective it becomes particularly in those over 50 years of age. It is not effective in post herpetic neuralgia. Local anesthesia does not affect the skin lesions for the regression of the vesicles takes the expected seven to 14 days.

Procaine injection to produce paravertebral block is used in those complaining of great pain. For blockage of the lower thoracic and lumbar sympathetic ganglions the patient is placed in a prone position with a pillow under the abdomen. After the spinous processes are located, local anesthesia is injected into the skin over the transverse process about two finger widths from the tip of each spinous process. A 22 gauge spinal needle is then introduced perpendicular to the skin and directed forward to the transverse process. The needle is then slightly withdrawn and directed either above or below the process toward the anterio-medial portion of the vertebra. After aspirating to ensure the needle is not in a blood vessel 6-10 ccs. of a one percent hydrochloride solution is injected into the region around the sympathetic ganglion. The anterior approach is used when the cervico-dorsal and the second and third thoracic sympathetic ganglions are to be injected. The patient is placed in a supine position with the head slightly extended and in the midline. A point two finger widths above the sternoclavicular junction and just medial to the common carotid artery is injected with local anesthesia. The needle is then pointed straight downward so it will hit the transverse process of the seventh cervical vertebra. It is next slightly withdrawn and aspiration performed before the procaine so-

lution is injected. After Horner's syndrome (constriction of the pupils, ptosis of upper eye lids, enophthalmos, hemifacial vasodilation and absence of sweating) appears the needle is withdrawn about 1 cm. and directed downward toward the thorax keeping close to the body of the vertebra. The area of the second and third thoracic sympathetic ganglions is then infiltrated. Most cases require only one blockage. While the sympathetic ganglions are not evidently affected the temporary chemical paralysis abolishes pain by inhibiting the segmental arteriolar vasospasm and promotes healing by dilution of the retained metabolites.

Herpes zoster ophthalmicus is a serious form of herpes zoster for it may result in partial or total blindness. Diphtheria antitoxin and convalescent blood are used in these cases along with local measures such as soaks, lotions and mydriatics. Walker and Walker⁴, using 5000 units of diphtheria antitoxin and repeating in 48 hours, if necessary, obtained relief of the pain and a rapid disappearance of the inflammation. Whether the results are due to the foreign protein therapy or to something specific is unknown. They felt that this was a specific treatment for they were able to relieve patients in the acute stage as well as those who had had pain for months and the relief was permanent. Thomas⁵ felt that 15,000 units at one time caused the eruption to disappear in twenty-four hours while 5000 units caused a gradual disappearance.

Convalescent blood is obtained from those who have recovered from herpes zoster. If the transfusion of 250-400 ccs. of blood is given before the ocular infection is established there will be good results. Since the ocular infection occurs later than the cutaneous eruption the transfusion may be successful if given as late as 14 days after the appearance of the eruption. In Gunderson's⁶ series of cases 82 percent of the patients retained useful vision if given convalescent blood and in the control series only 47 percent retained useful vision.

X-ray therapy both superficial and deep, is valuable in the treatment of herpes zoster. Superficial x-ray therapy over the eruption will cause a more rapid regression of the lesions, but does not affect the pain. 80-100 Kv, 5 MA, at 30 cm. distance and a daily dose of 70r for four or five times is effective. Deep x-ray therapy over the involved spinal ganglion is effective in relieving pain and is one of the best methods for the treatment

of post herpetic neuralgia. McCombs⁷ and his associates, using 200 Kv, with 1mm. Cu. and 1 mm. Al. filter, at 50 cms. distance, giving 200r every other day for five or six times, cured 46 percent of those treated in eight to 14 days whereas only 16 percent of the control group was relieved in that period of time. As with other treatments of herpes zoster, the sooner treatment is started the quicker are the results. Around 90 percent of the patients treated in the first seven days of the disease will be completely relieved of pain. Age is an important factor for over 90 percent of those who do not respond to x-ray are over 50 years of age. Those whose pain is increased following the first treatment have the best results. To insure recovery the full course of 1000-1200r must be given for relapses will occur frequently if the entire series is not given.

Other recommended treatments for herpes zoster are smallpox vaccination every day or every second day for two to five times; neoarsphenamine .3 grams one or two times; typhoid vaccine 2 cc. intramuscularly; sulfapyridine; or a continuous galvanic current between 2-3 milliamperes for 10 minutes three times daily over the root of the affected nerve.

Surgery is used at times for intractible post herpetic neuralgia. Section of the posterior root and chordotomy have been tried with some success. The latest surgical procedure is removal of the affected dermatome with part of the fatty tissue and doing a skin graft. At times even surgical interference does not relieve the pain and for these patients psychotherapy is advocated.

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DO YOU KNOW?

That Everett Lain, M.D., Oklahoma City, also attended the American Medical Association in June, Atlantic City, New Jersey, although his name was erroneously omitted in the list of Oklahomans registered which was published in the August Journal? Dr. Lain registered the opening day and stayed until it was over. He has attended the A.M.A. each year for the past 12 years.

The Electroencephalogram In Severe Head Injuries With Tantalum Cranioplasty*

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TULSA, OKLAHOMA

Before launching into the more technical aspects of this paper, certain explanations of this rather new technique should be made. Likewise, it is important and fitting that recognition be given to my former Chief, Charles L. Yeager, M.D., through whose tireless collection of data the technical portion of this paper was made possible.

The electroencephalogram is a highly specialized means of amplifying and recording the minute electrical impulses or potentials which emanate from the cerebral cortex. Roughly speaking, one may say that the electroencephalogram is to the brain what the electrocardiogram is to the heart. In 1934, Hans Berger, who is considered to be the father of electroencephalography, demonstrated that man's brain has an electrical beat or potential coming from the neurones, and that this so-called beat is altered by age, sensory stimuli and pathological states. Normally this potential appears as a fluctuation in voltage with a variable frequency from one to 60 cycles per second. The normal rhythm found in adults has been termed Alpha and varies from eight and one-half to 12 cycles per second. Beta waves are much faster and vary between 15 and 60 cycles per second. Waves with a frequency of less than five cycles per second are termed Delta. The technique consists of a standard eight lead application of electrodes arranged bilaterally over the frontal, parietal, temporal and occipital areas and recordings are made therefrom. To describe sharply defined boundaries of a lesion, additional electrodes are employed.

The general practitioner should be interested in this apparatus as an aid in the diagnosis of certain conditions involving the cerebral cortex. It is important to point out that the recordings obtained by this means should be viewed in much the same light as other laboratory data, and not look-

ed upon as a dogmatic statement of fact. One's clinical impression should still remain foremost, and the material obtained from this technique is to be used only as it corroborates such clinical impression.

With few exceptions the electroencephalogram can be of probably its greatest value to the clinician as a diagnostic aid in the epilepsies. There are very characteristic patterns seen with grand mal, petit mal and psychomotor types. Not only may this technique be employed as a diagnostic aid, but also as a guide in the treatment of these conditions by the judicious use of follow-up recordings after the patient has been carried along for a period on anticonvulsant medication. It is highly important to remain constantly aware of the fact that the most extreme abnormalities in the EEG may be completely unassociated with any abnormal clinical manifestations; likewise, a patient may present a history of repeated, severe seizures and yet show very little in the way of an abnormal interseizure recording. Various behavior disorders, so-called absent mindedness or perhaps unexplained headaches may, by means of the EEG, be found to have an epileptogenic basis.

There are many other conditions in which the EEG may be of definite benefit. Increased intracranial pressure in itself is not a direct cause of abnormalities in the EEG unless it is sufficiently high to interfere with cerebral blood flow. The characteristic waves seen are thought to be due to cerebral edema interfering with cell nutrition.

Brain trauma sufficient to produce laceration, hemorrhage or edema of the cortex likewise produces changes in the EEG pattern. Intracranial tumors or abscesses can be accurately localized.

The technical data of this paper is based upon the records of some 64 patients, all soldiers in the U.S. Army. These recordings were made at various time intervals preceding and following tantalum cranioplasty after severe head injuries, to determine the

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 16, 1949.

various EEG changes. It is important to keep in mind that the average elapsed time from the date of injury to the time of surgery was about five months. Thirty percent of the cases displayed a pre-operative normal EEG, and the subsequent course of this group showed 53 percent improved, 27 percent became worse, while the remainder was unchanged. It may be puzzling to you as to how the originally normal records could improve, but the criterion for this phenomenon was the improvement in the regularity of the Alpha rhythm.

In each instance, the pathology found correlated with the rhythm changes in the EEG. Likewise there was a positive correlation between the site of injury and the clinical signs displayed.

Seventy percent of our cases initially displayed abnormal EEG recordings and of these about 50 percent improved following surgery and 25 percent became worse with the remainder unchanged. Here the criterion by which the records were judged was through the development of asymmetry, slow waves, dysrhythmia or a focus, or a change from any of these features to a more normal pattern.

Sixteen cases, or about 25 percent, initially displayed electroencephalographic evidence of a latent epilepsy which was determined by the presence of a high amplitude, slow type of dysrhythmia. Eleven of these 16 patients also showed clinical epilepsy of the grand mal or petit mal variants. It is noteworthy here to add that there were three cases which displayed clinical evidence

of a convulsive disorder but did not show any latent epilepsy on the EEG. An effort was made to determine whether or not there existed a relationship between the area of damage, and the EEG evidence of a latent epilepsy, and it was found that 85 percent of all cases with such evidence suffered parietal lobe injuries. It must be understood, however, that portions of adjacent cerebral tissue were likewise involved. Insofar as a relationship existing between the area of damage and evidence of clinical epilepsy is concerned, the parietal lobe injuries likewise dominate, with the occipital lobe injuries coming next in line.

Another interesting fact brought out by this study was that in those cases developing clinical convulsive disorders, there was the greatest length of time elapsing between injury and surgery. Also, the contre coup phenomenon was definitely demonstrable electroencephalographically in several of the cases.

From this study, one may draw the following conclusions:

1. That latent epilepsies frequently follow severe head injuries and that these are demonstrable on the EEG.
2. That injuries involving the parietal lobes are more likely to result in a form of epilepsy.
3. That apparently, the greater the length of time from a severe head injury to the repair of same by cranioplasty, the greater the chances for the development of clinical evidence of a convulsive disorder.

The Effects Of Certain Steroid Compounds On Various Manifestations Of Rheumatoid Arthritis

A Preliminary Report

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Testosterone propionate, estradiol benzoate and certain of their derivatives have been used in relatively large amounts in the treatment of 90 patients with rheumatoid arthritis. In addition, six patients with the shoulder-hand syndrome, four patients with

chronic tophaceous gout and two patients with rheumatic fever have received similar steroid therapy.

The results obtained have been sufficiently striking to warrant a preliminary report. Improvement in pain, edema, weight gain, appetite, mental outlook, mobility, red blood cell count and sedimentation rate has been much greater than that previously experienced by us with any other type of therapy.

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We have not used 17-hydroxy-11-dehydrocorticosterone in the large doses described by Hench et al.^{1 2 3}

The general results and the length of the observation period do not warrant at present the use of these substances as a "treatment" or a "cure". This report is given in the light of its bearing upon the problem of the rheumatoid state. In view of the work in progress in many centers using various types of steroids on patients with rheumatoid arthritis, it is hoped that the shortcomings of this study, and of that reported by Hench et al will be overcome, and a more suitable product will result to unlock the riddle of this group of diseases.

Rheumatoid Arthritis. A total of 90 patients received one or more of these steroids for periods ranging from four to 12 weeks, and 81 went into a remission. A patient was considered in remission when he became pain free, had a sense of well-being or euphoria, was free of swelling, had a loss of morning stiffness, a normal appetite, and the red blood count and sedimentation rate either normal or approaching normal. The most consistent evidence that a patient was beginning to respond was a marked desire to stretch. Four of the group made no response at all, and five patients continued to respond erratically or had irregular periods of incomplete remissions and exacerbations. Early in our studies many of the patients responded in the latter fashion, but as we learned more about dosage, balance between hormones, absorption time and evidence of side reactions, only five remained in the group which did not respond adequately.

In developing a technique for arriving at the proper dose and balance of substances used, it was found that there were marked individual differences. The dose level and balance had to be determined individually in analagous fashion to determining the dose of insulin for a diabetic. In general, the most satisfactory technique of arriving at the proper dose and balance was found to be as follows: Between 100 and 300 mgs. of testosterone propionate in oil,* using a solution of 50 mgs. per c.c., were given intramuscularly. The dose was varied according to the sex and weight. The patient was observed for a 48 to a 90 hour period and no more was administered until the effect was dissipating. About 65 per cent of the pa-

tients showed marked improvement within 24 hours, lasting approximately two days. Smaller or larger amounts were then administered at intervals indicated by the time of persistence of the effects of the first injection. After the minimal dose was determined, estradiol benzoate was started, initially about 0.033 mgs. together with the androgen. This dose was increased to the maximal amount of estrogen tolerated. Evidence of estrogen overdosage was exhibited by a sense of ill-being, nausea, and a return of the rheumatic complaints.

The androgenic and estrogenic steroids were given in the selected combination at the indicated intervals for approximately three weeks. Pregnenolone* was then started in addition, usually 100 mgs. initially. Androgens and estrogens were reduced as much as possible keeping their relative proportion, the object being to avoid undesirable virilizing effects.

Testosterone propionate was most effective in controlling the arthritis, but due to its virilizing effects, it was considered unwise to use it alone for more than four weeks in women. Pregnenolone appears to be less apt to produce undesirable side reactions, but generally was not as effective in controlling rheumatoid state. In four patients, however, pregnenolone alone was more effective than testosterone propionate and estradiol benzoate, and 14 women (21 per cent) responded better to the combination of the three steroids than to androgens or to pregnenolone alone. As the patient improved, the intervals between injections could be increased. At all times, an attempt was made to maintain the effective minimal dose levels.

Overdosage of the androgen and estrogen must be avoided. Initial effects of over dosage of androgen include: edema, drowsiness, sense of ill-being, tinnitus, and frequently a mild exacerbation of rheumatic symptoms. Delayed effects include: hoarseness, acne, hypertrophy of the clitoris, edema of the labia minora, tenderness of the nipple, and darkening of the areola. In two male patients, it was thought there was beginning prostatic hypertrophy following three months of androgen therapy.

The effect on menstrual cycles was entirely without pattern. Some women flowed more heavily than usual, others had increased pain, a few had delayed periods,

*Aqueous suspension of testosterone was substituted satisfactorily in the male patients at Will Rogers Veterans Hospital. This preparation was obtained through the courtesy of Dr. L. E. Josselyn and Mr. E. D. MacKenzie of the Abbott Laboratories, Chicago, Ill.

*The pregnenolone was obtained through the courtesy of Dr. W. Alan Wright, The Schering Corporation, Bloomfield, New Jersey.

and some had scant flowing appearing several days ahead of schedule. A few of the patients were free of dysmenorrhea which had been present previously, and others ceased to have a premenstrual flare up of arthritis. Only one young woman missed her period. She has had no other untoward symptoms and her arthritis has responded satisfactorily. In the older post-menopausal women, the atrophic vaginae developed a thickened mucosa with a marked increase in mucus secretion. None have evidenced uterine bleeding.

Desirable side effects from the testosterone propionate included increased appetite, better sleeping habits, improved mental outlook, and increased libido. The blood pressure in all patients receiving the testosterone was depressed, and, in patients with hypertension, there was an appreciable drop during the period of therapy. Elevated body temperature, when present, returned to normal.

Only one of the patients receiving pregnenolone exhibited undesirable side reactions. These included mental depression and a feeling of weakness. It is to be noted that the pregnenolone did not produce the euphoria which characterized the response to testosterone. Progesterone was also used in amounts varying from 25 to 75 mgs. No definite or specific beneficial effects have been noted; however, observations are being continued. Testololactone* is now being used on three patients with promising results, but as this time observations are incomplete.

The group of cases classified as rheumatoid arthritis included variants such as rheumatoid spondylitis, psoriatic arthritis, Felty's disease, Reiter's disease, the type of rheumatoid arthritis associated with peritonitis, and one patient with erythema nodosum associated with severe constitutional reaction and polyarticular effusion.

The urethritis and conjunctivitis in the two patients with Reiter's disease subsided promptly, and recurred when placebos were given or the injections were discontinued. This disease seems to have a marked tendency for natural remission; both of our patients, after six weeks of therapy have required no further treatment to the present time.

The patients with rheumatoid spondylitis (Marie-Strumpel's disease) responded similarly to those with rheumatoid arthritis.

One patient with severe iritis became pain free within 24 hours, and the entire process had subsided within five days.

Psoriasis was present in three of the rheumatoid group. The psoriasis improved slowly in each case but none have completely recovered to date. One of the three was classed as psoriatic arthritis; there was improvement in this patient's nails and terminal interphalangeal joints. The new nail growth has been normal.

One patient's joint reaction was unusually severe, and was associated with peritonitis following intestinal obstruction and resection. This patient's remission following 200 mgs. of testosterone propionate was unusually rapid, and in addition he became afebrile and his white blood count returned to normal. He relapsed twice following the substitution of a non-specific control injection and each time he responded when testosterone propionate therapy was resumed.

The two patients with Felty's disease have responded satisfactorily in regard to the joint symptoms, but to date the lymphocytosis has not returned below 60 per cent in either patient.

One patient, a white woman, age 72, had erythema nodosum associated with 103° fever, pneumonitis with cyanosis, vomiting, multiple joint effusion and coma. The white blood count was 18,000, the sedimentation rate (Westergren) was 97 mm. in one hour, the urine contained white cells, casts, glucose and albumen. The onset of her disease was abrupt, and she had run a severe downhill course. A diagnosis of lupus erythematosus disseminata was considered, but her age and white blood cell count did not favor this conclusion. She was given daily injections of 100 mgs. of testosterone propionate. On the third day she was symptom free and she was dismissed from the hospital on the seventh day. There has been no relapse to date.

The Shoulder-Hand Syndrome. (Frozen shoulder associated with swollen, ischemic hand). Of the six patients with this syndrome, all responded quite promptly to the androgen therapy. Here again, when it was necessary to continue treatment beyond three weeks, the estrogen and pregnenolone were added to counteract any possible undesirable side reactions of testosterone. These six patients were pain free after 48 hours, but did relapse when control injections were given or the therapeutic injections

*The Testololactone was obtained through the courtesy of Dr. I. C. Winter of the G. D. Searle and Company, Chicago, Ill.

tions were discontinued. As this syndrome is self-limited, therapy was discontinued when a natural remission occurred. The general management described elsewhere by one of us (W.K.I.)^{4,5} was used.

"Chronic" Tophaceous Gouty Arthritis. Of the four patients in this category, all became pain free and had improvement in their general health. The response was prompt, requiring from four to 43 hours for the pain to subside. All of these patients had large multiple tophi and they had not responded to colchicine, large doses of aspirin and a purine free diet.

Rheumatic Fever. The two patients with rheumatic fever in this series were patients of J. N. Owens, Jr., M.D. Both had been refractory to salicylates and general therapy.

The first patient was a girl of 12 who had rheumatic fever four years. She was in relapse, running continuous temperature from 102 to 104 degrees. Cardiac decompensation was present. Testosterone propionate in 50 mgs. doses were administered daily. She became pain free on the second day, temperature free on the third day, and was able to sleep lying flat by the fifth day. The red blood cell count of 4,000,000 on the 14th day compared favorably to the count of 2,300,000 prior to treatment. The sedimentation rate was 59 mm. in one hour, initially, and 24 mm. in one hour on the 14th day. The second patient responded similarly.

DISCUSSION

That testosterone propionate should exert a beneficial effect in rheumatoid arthritis is not entirely unexpected. Since the pioneering studies of Kenyon and his associates⁶ the general metabolic effects of testosterone, particularly the nitrogen retention, electrolyte-fluid balance, and carbohydrate utilization have received wide recognition. The rapid improvement of our patients, including gain in weight, increased strength, improved appetite, decreased edema, and general feeling of well being and euphoria probably represents enhanced general metabolic reaction to the relatively large amounts of steroids.

We wish to reemphasize that we do not believe these substances exert specific anti-rheumatic effects, or are necessarily the ultimate compounds of choice in the therapy of rheumatoid arthritis. Rather they represent nonspecific steroids which, through their metabolic activity, exert beneficial effects on the arthritic process.

It is probable that the testosterone itself does not act directly but is altered in the

body to another steroid form. This is borne out by the fact that several derivatives of testosterone, having little or no sex activity, have given promising results. Also large doses of methyl testosterone, which is relatively stable and remains unaltered in the body, does not induce the same favorable results, and, in addition causes dysuria oliguria and edema.

It is questionable if these steroids can be given for an unlimited length of time. However, if they can provoke a natural remission they will be a valuable addition to our general management of these rheumatic diseases. Obviously, controlled remissions offer unusual opportunity to observe metabolic changes involved in the arthritic process.

Caution should be exercised by those electing to observe the effects of these substances on the various rheumatic states. The long range cumulative effects have not yet been studied and therefore, care must be exercised in their use.

CONCLUSIONS

Testosterone propionate in adequate doses, in combination with estradiol esters and pregnenolone favorably altered the course of the disease in 81 of 90 patients with rheumatoid arthritis.

Variants when present, such as the conjunctivitis and urethritis associated with Reiter's disease, likewise, erythema nodosum, psoriasis and iritis, were favorably affected.

Six patients with the shoulder-hand syndrome, four with chronic tophaceous gouty arthritis and two with rheumatic fever were also favorably influenced by these steroids.

Since these steroids are potentially dangerous when administered over a long period of time, caution should be exercised by those who elect to observe their effects on the rheumatic states.

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A Simplified Method Of Diagnosing Peptic Ulceration And Determining Activity*

TURNER BYNUM, M.D., F.A.C.P. AND GEORGE WINN, M.D.

The present study was undertaken because of the difficulty so frequently encountered in determining activity of peptic ulcerations. Here so frequently the X-ray reports "duodenal deformity, probably due to ulcer, activity undetermined." This is of particular importance in veterans, where presence or absence of activity determines compensability.

We have found that the method employed not only helps in determining activity, but has been a valuable adjunct in diagnosing lesions where the X-ray findings are either equivocal, or where X-rays are negative, as is so frequently the case in posterior wall ulceration.

"The evaluation of the results of the treatment of peptic ulcers, especially of chronic duodenal ulcers, is fraught with frustration. Without any clear-cut criteria of healing, one works in the dark. There are no means of direct inspection of the lesion, and even the roentgenograms are not wholly reliable in detecting either an early lesion or a residual one. Thus, one has to depend almost entirely on the freedom from symptoms, supported by roentgen evidence of inactivity. Here again, the problem is relative. Relief from what symptoms? Apart from such perfectly definitive and describable symptoms as pain, vomiting, burning, sourness, pain in the back, epigastric tenderness, "gassiness" and finally eructations, are the symptoms of vague gastro-intestinal discomfort. These latter the patient, especially the less-articulate one, cannot define or describe but are perceived only when he feels relieved and achieves a state that may be called eupepsia, i.e., perfect gastro-intestinal comfort. A state of eupepsia, then, supported by roentgen evidence of healing, may indicate a reasonable certainty of healing. And yet, one set of evidence can often belie the other. The gastroscope, wherever available and practicable, by showing the presence or absence of associated gastritis, may be of value in helping one to arrive at an ap-

proximation of the state of healing. It is often difficult symptomatically to decide whether a state of activity has returned, i.e., whether a return of one or more symptoms denotes that a quiescent ulcer has become active, a healed ulcer has broken down again, or a new one has formed. Should the return of the vague symptoms of dyspepsia or of the "gassiness" or heartburn be construed as a reactivation, a recurrence of a new ulcer formation? Until the symptoms are calibrated against roentgenologic and other findings, the state of knowledge is bound to be uncertain."¹

In a review of 15,000 patients with chronic dyspepsia examined at the Mayo Clinic, only 18 per cent were found to be due to gross organic disease of the stomach and duodenum. The most common diagnostic error in the series was that of overlooking duodenal ulcer, which occurred in 39 cases proven by subsequent examination.²

Duodenal ulcer represents at least eighty per cent of peptic ulceration. Definite X-ray visualization of duodenal ulcer, with niche demonstration, occurs in less than two-thirds of cases of active ulceration, and at least 10 per cent of active ulcers give no definite diagnostic findings by X-ray. In the remainder of the cases one must rely on secondary non-specific signs, such as localized tenderness and deformity of the bulb, without niche visualization, to confirm the clinical impression.

Recently this problem was discussed in detail by Allen E. Hussar, of Los Angeles, California, in a follow-up study of 305 veterans discharged from the service because of peptic ulcer.³ In this series, X-ray examination revealed an active ulcer crater in 22 per cent of the cases, an irritable bulb in 11 per cent, a deformed duodenal bulb in 41 per cent, and negative findings in 26 per cent of the patients. Clinical activity, as determined from the patients' symptoms, was found in 60 per cent of the cases. X-ray confirmation of the activity of the ulcer was present in only approximately one half of those which were thought to be clinically active. In this series, due to the fact that the X-ray findings and the clinical impres-

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sion were at such variance, an ulcer was considered active, if the patient, at the time of the last examination, complained of the same symptoms he had had at the time the diagnosis of peptic ulcer had first been established, regardless of the present X-ray findings. On this basis, a diagnosis of active peptic ulcer was made in 68 per cent of the cases. From this and our own experiences, it would seem of value to have another test to help in deciding whether an ulcer is active.

With this in mind, a study of the string test, which was described by Max Einhorn in 1909,⁴ has been made, in an effort to find other objective evidence of activity of a peptic ulcer in which an active crater cannot be demonstrated by X-ray. Also, a study has been made of the comparative results of the two tests.

The Einhorn string test was one of the accepted methods of demonstrating a peptic ulcer in the years prior to the X-ray examination.⁴ The test consists of having the patient swallow a thread, which remains in the stomach and duodenum overnight. An ulcerative lesion will produce a dark brown stain on the thread. It must be stressed that the test is non-specific, and that any lesion in the stomach or duodenum which oozes blood may give a positive test.

The technique described by Einhorn is essentially as follows.^{4 5 6} After breakfast on the day of the test, the patient is to eat nothing but white soft foods. A 36 inch piece of Number 5 braided English silk, which has been securely tied to a duodenal bucket or a shot, is used. A safety pin is attached to one end of the string and fastened to the patient's shirt. A knot is tied to the thread 22 inches from the duodenal bucket, and another 32 inches from the bucket. The thread is passed two hours after the evening meal for the distance of the first knot. The patient is then allowed to eat crackers and milk as the string is passed to the second knot. The string is removed the next morning after breakfast. The presence or absence of a bile stain and a dark brown-black blood stain is noted when the string is removed. The conclusions of Einhorn are: 1. Many active ulcers produce a blood stain on that portion of the thread which is deeply bile-stained. 2. A blood stain proximal to the bile-stained end is suggestive of an ulcerative lesion of the stomach. 3. False positive and false negative results are obtained, but many active ulcers produce a blood stain. Linen thread has also been used in place of silk.

During the recent war one of us (T. B.) was stationed with an evacuation hospital where facility for definitive gastro-intestinal X-ray work was not available, and there was occasion to use the string test as originally described. Our present study has shown that our results with this test were at least as good as a single gastro-intestinal X-ray study. It has also shown that the use of a larger cotton string is superior to either silk or linen, and, contrary to Einhorn's belief. That duodenal ulceration produces a stain in the bile-stained region, the stain occurs usually at the proximal end, or caudad to the bile stain.

The technique used in this study was to have the patient swallow 36 inches of a Number 14 or 16 ordinary cotton twine, and to retain it overnight, with the proximal end taped to his cheek. The patient may continue his ordinary feedings and medication, which do not interfere with the interpretation of the test.

If the string is retained, and no marked obstruction is present, it will be carried through the pyloric ring. This will be verified by the finding of a bile-stained distal few inches of the string on removal. If duodenal ulceration exists, there will appear a dark brownish-red discoloration either at the upper end of the bile stain or within two inches of this stain. A stain appearing above this level is considered to be due to gastric or esophageal ulceration, depending on its location. Usually a bleached area of string is noted in that portion which lay within the stomach.

The string may be left in place for from two to four days with no ill effects and no appreciable difference in the results. Strings which have been made demonstrable by X-ray, either by attaching lead shots or by soaking in lipiodol, have been shown to pass through the pylorus in four to six hours. The string is found to lie along the lesser curvature of the stomach. The dark brown discolorations, considered indicative of ulceration, have been consistently shown to give a positive benzidine test, whereas negative strings do not. Bile obtained at autopsy, when diluted, has been shown to discolor cotton twine similar to the bile stain during a string test.

Figure 1 shows the results of comparison of the string test with X-ray 114 times in 100 admissions to the hospital. The reason there are more comparisons is that in several cases the progress of the patient was followed with both string test and X-ray. The size of the darkish discoloration has

been observed to decrease gradually with treatment of the ulcer. When the strings have become negative, the X-ray examination invariably fails to disclose the previously seen active crater. We found this to be so consistent, that during the latter period of this series, active patients were followed with a string until negative, and then had a repeat X-ray examination for confirmation. This relieved much of the burden of following the patient from the overloaded X-ray department.

In 72.3 per cent of the comparisons of the string and X-ray findings, the results were the same. In these instances, it is felt that a correct diagnosis could have been made from either test.

In 18 instances, or 16 per cent of the comparisons, the results of the initial X-ray examination and the string test have disagreed. We feel that this is the important group. In 11 of these the X-ray was entirely negative, with a positive string. In five other cases the initial X-ray showed a deformed bulb, but no crater or other evidences of activity were reported. Of these 16 patients three were shown to have an active ulcer crater on recheck X-ray examination. In two other patients active ulcers were reported at a later date, with the string test continuing positive during the intervening time. In a sixth case a posterior duodenal ulcer was demonstrated at surgery following repeated positive string test and



STRING TEST STATISTICS

The string test is compared 114 times in 100 admissions.

| | |
|--|----|
| String positive and X-ray positive for active ulcer | 30 |
| String negative and X-ray negative following treatment | 15 |
| X-ray negative and string negative initially | 28 |
| String negative with X-ray showing a duodenal deformity. No active ulcer by X-ray. | 10 |
| Initial X-ray negative with a positive string | 11 |
| Initial X-ray showing a deformed bulb, with no active crater, and a positive string | 5 |
| Negative string, with X-ray reporting an active ulcer | 2 |
| String wine-colored, with X-ray negative | 1 |
| Felt to be gastritis. | |
| <i>Unsatisfactory tests:</i> | |
| Unable to swallow string, negative X-ray | 7 |
| Unable to swallow string, with X-ray showing deformed duodenal bulb | 2 |
| Unable to swallow string, with X-ray showing an active ulcer | 2 |
| String discolored due to tobacco stain | 1 |

LIST OF ILLUSTRATIONS:

Fig. 1—String Test Statistics.

Fig. 2—Showing string in place, with distal end taped to patient's cheek.

Fig. 3 and Fig. 4—From preliminary gastrointestinal X-ray series, which was reported as negative, and the specimen removed at surgery, which showed an active ulcer crater; one of the cases in which the X-ray failed to show evidence of duodenal ulcer, but in which the string test led to the proper diagnosis.

Fig. 5—Case in which the string test was repeatedly negative, although the X-ray showed a large filling defect on the greater curvature. Surgical specimen confirmed the finding of no break in the mucosa in this large infiltrating growth.

Fig. 6—Showing string, with attached lead beads, in situ, the distal bead lying in the duodenum, the proximal bead lying in the cardiac end of the stomach.

negative X-ray examinations.

Repeat X-ray examination in another instance showed a duodenal deformity, but an active ulcer crater could not be found. The patient had active ulcer complaints over a three year period, and responded well to treatment. Two other cases had previously confirmed diagnoses of peptic ulcer, and were offering the same clinical complaints which they had had originally. In one case X-ray felt there was the possibility of a posterior ulcer which could not be demonstrated. One case with a positive string and a negative X-ray gave no definite history of upper GI tract disease, but was hospital-



ized at the time for ulcerative colitis. IN ONLY TWO INSTANCES of positive string tests and repeated negative X-ray examination was medical management of the dyspeptic complaint a complete failure in this series.

In six of 16 patients with initial positive strings and negative X-ray examination, active ulcers have been shown to be present, either by repeat X-ray examination or surgery. It is satisfying to know that the young patient with an ulcer history and ulcer complaints has either a positive or negative string to confirm the X-ray findings. If the string remains positive and the X-ray negative, further diligent search by X-ray for an ulcer is indicated.

In two cases the string test was negative and the initial X-ray positive for an active ulcer. In one of these the X-ray reported a suspicious niche in the pre-pyloric area, with a deformed duodenal cap. The other case had a clinical ulcer syndrome and a previously confirmed diagnosis of a duodenal ulcer. X-ray showed a spastic deformity of the duodenal cap which was felt to be due to an ulcer. A second X-ray examination was reported as negative.

In four cases included in this series, the ulcers have been demonstrated to be present at surgery following positive string tests. In one case the ulcer was not found at surgery, after both X-ray examination and the string test were positive for ulcer.

In one case the string was covered with a wine-colored blood stain over the length of the string which was felt to be in the stomach. This was undigested blood. The patient clinically had a diagnosis of gastritis, acute, with gastro-enteritis, acute. Subsequent upper GI tract X-ray examination was negative.

The case of K. O. P. shows the difficulty that can be encountered with the string test. On the basis of the negative string and the inability to find the previously reported gastric ulcer by X-ray, the patient was told that he did not have a gastric ulcer to account for his complaints. The string test continued to be negative at a later date when carcinoma was found by X-ray. It was felt that he did not have an ulcerating lesion. This was confirmed at surgery.

In 12 instances the test was considered unsatisfactory. These were mainly because of inability of the patient to swallow the string or retain it. One case was unsatis-

factory because of discoloration from tobacco juice. Of the other eleven cases, in only two patients was an active ulcer demonstrated by X-ray. Subsequently it has been noted that the attitude of both the patient and the doctor prescribing the test will play an important part in the patient's ability to retain or swallow the string.

SUMMARY

Revision of the technique of an old test originally described in 1909 has been presented. This test has been largely discarded by being overshadowed by the development of the X-ray. The procedure has been found to be an invaluable addition to the armamentarium in diagnosing and in determining activity in peptic ulceration.

The test has been compared with X-ray results 114 times in 100 admissions to the hospital. In 72.3 per cent of the comparisons the results have been the same. In this series the string test was found to be a more reliable guide, both in the diagnosis and determination of activity, than a single X-ray series.

The technique of the test has been described and simplified. The use of ordinary cotton twine, rather than silk or linen, is advocated.

CONCLUSIONS

This test may be used to advantage in any of the following circumstances:

1. As a "screening test" to determine who should be X-rayed.
2. When the clinical and X-ray findings are not in agreement.
3. To increase the accuracy of diagnosing peptic ulceration as an adjunct to X-ray.
4. To determine activity in an already diagnosed case of peptic ulceration.
5. To reduce expense and load of frequent and repeated X-rays.

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CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Medicine*

HOWARD C. HOPPS, M.D., AND W. W. RUCKS, JR., M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: Our case for today poses a very difficult diagnostic problem, one which was not solved during the patient's life. I apologize to Dr. Rucks for the obscurities in this case and assure him that our primary purpose in selecting him as discussant was to utilize his excellent ability as a teacher.

PROTOCOL

Patient: C. S., 56 year old white male. Admitted February 19, 1944. Died March 14, 1944.

Chief Complaint: Pain and swelling of the right knee.

Present Illness: The patient was apparently well until 18 months before admission. While working as a mechanic in Phoenix, he had an acute onset of a rather prostrating febrile illness (temperature unknown). It began with vague generalized aches and malaise, "just like the flu." Very shortly he developed a widespread, mildly pruritic "skin rash and hives." There was an accompanying mild non-productive cough. A few days later his wife noticed a slight icteric tint to his skin. He was forced to remain in bed at first, but over a period of two or three weeks there was gradual remission of all the symptoms except for the cough. He then returned to work and was able to perform his regular duties despite the fact that he never felt "up to par" again. There were rather frequent episodes of epistaxis and on two occasions he coughed up a small amount of blood. About six months later he became conscious of a slight swelling in the lower lateral aspect of the right thigh. There was moderate tenderness around the knee and exaggerated movement produced some pain. No local increase in heat or erythema were noted. He denied any precipitating trauma and he could recall no fever or constitutional symptoms (except for his continued cough). As time went on, his pain was intensified and applications of many different local medications were without effect. About four months later he fell and struck his knee a rather trivial blow. There was an abrupt increase in the swell-

ing and the overlying skin became hot and red. From that moment on he was almost completely disabled by the pain. He traveled from doctor to doctor in a vain attempt to obtain relief. About one month before admission there began a moderate, but persistent, distention of his abdomen. A short time later edema of the feet and ankles became evident. He felt that he had lost a slight amount of weight, but the exact amount was not known.

Past History: He had gonorrhea 15 years previously. The wife stated that he had been deeply jaundiced for a short time about five years before admission.

Family History: Not recorded.

Physical Examination: T. 98°; P. 88; R. 20; BP 130/80. He was a well developed and well nourished white male. The pupils reacted normally. Scattered moist rales were heard in both lung bases. The heart was within normal limits to percussion and auscultation. The abdomen was slightly distended and it was felt that there were signs of fluid present. The liver was not palpated. The right knee was two times enlarged and fluctuant. There was marked local tenderness but no redness or increased heat. Bilateral edema of the feet and ankles was present; this was moderate on the left and marked on the right.

Laboratory Data: Urinalysis was not recorded. Hb measured 11.6 gm.% with 3,170,000 RBC/cu. mm. WBC's numbered 3,200/cu. mm. and a differential count showed 78 percent neutrophils and 22 percent lymphocytes. The Mazzini test was negative. The spinal fluid was reported to show 7,000 WBC and 15,000 RBC/cu. mm. with a total protein of "3.5 percent" and positive globulin. An ECG was interpreted as "left axis deviation". X-rays revealed "marked soft tissue swelling of the right knee with anterior displacement of the patella. There is suggestive erosion of the medial tibial condyle. Diagnosis — effusion into right knee joint". A chest plate two weeks later showed an essentially normal cardiac outline with

obliteration of the right costophrenic angle. "Diagnosis — effusion into right pleural cavity."

Clinical Course: In the OPD before admission 200 cc. of fluid (character not described) were removed from the right knee joint. Aerobic and anaerobic cultures of this fluid showed no growth. Attempts to aspirate fluid one and two weeks later were unsuccessful. The patient spiked a daily temperature elevation of 99° to 103°. He was given supportive therapy in preparation for orthopedic correction of the knee. About one week after admission it was felt that he was jaundiced and an icteric index at that time was 25. He was given parenteral glucose and one blood transfusion, but he did not improve. On the 22nd hospital day he suddenly vomited about 250 cc. clotted blood, following which he became markedly disoriented. Upon examination there were numerous moist rales over all lung fields. The respiratory rate was 40 and pulse rate 140; blood pressure was not recorded. Despite supportive therapy he died 24 hours later.

CLINICAL DIAGNOSIS

DR. RUCKS: I shall not re-read the entire protocol but I would like to review what seem to be the important points. This man was 56 years old and he was sick for 18 months before he died. About 19 months before he died he lived in Phoenix, Arizona, which may be an important fact. His initial illness could have been most anything. It began, according to our data, "just like the flu", with malaise, fever, and a non-productive cough. There were two things about this, however, that are somewhat extraordinary. He had some kind of skin rash; this may have been hives. He probably received penicillin and this with his fever could explain the skin rash. On the other hand, there are certain specific febrile diseases characterized by skin rashes. Apparently, this initial illness was rather severe. He was in bed for two or three weeks, and it took him quite awhile to be up and about — even then he still had some cough. He never did feel completely well after this illness of 18 months ago. He had a slight nose bleed a few times, and on two occasions he coughed up a small amount of blood. Apparently he went back to work, but didn't feel like it. About six months later he observed a swelling of the lower lateral aspect of his right thigh. This plays an important role throughout the remainder of his course. This is a very difficult thing to evaluate and

adds much confusion to the picture. There was moderate tenderness about the knee and movement caused pain. It wasn't red or hot, and he recalled no previous injury. We notice that at this time he was still coughing. As we continue the patient's course, the knee begins to assume major proportions and apparently the pain became very severe. According to the story here, there was an increase in swelling and the overlying skin became hot and red. From then on the patient was completely disabled. About a month before he came to the hospital (about two months before he died), he began to have some swelling of the abdomen, for the first time, and then he developed edema of the feet and ankles. In spite of all this he had not lost much weight, and according to the note in the physical examination, he was a well developed, and well nourished man.

The past history reveals gonorrhea 15 years previously, which I don't believe contributes anything to the present illness. I certainly do not believe that he had gonococcal arthritis. His wife stated that he had been deeply jaundiced for a short time, about five years before admission — this may be important.

On physical examination it states that he did not appear to be very sick. He was treated in the Outpatient Department for awhile. It was thought that there was some fluid present in the abdomen, but the liver wasn't enlarged and the heart was of normal size. I think that we can eliminate congestive heart failure. At this time the knee is described as being enlarged to twice normal, fluctuant, and with marked local tenderness. Apparently there was more edema of the foot on the side of the involved knee than on the other side. He wasn't very anemic; he had over 3,000,000 red cells and 11.5 gm. hemoglobin. He did have a leukopenia with a relatively normal differential count. Now, for no apparent reason, we have a report of his spinal fluid. Surely there must have been some reason why this was examined, but it is not indicated in the protocol. The spinal fluid contained 7,000 white cells and 15,000 red cells and "3.5 percent" protein. The report of protein is obviously in error. The large number of RBC's indicates a "bloody tap", but even so, there should not have been 7,000 white cells. We must therefore assume that the patient did have an abnormal spinal fluid.

On x-ray examination it was thought that there might be a little erosion of the medial tibial condyle, but apparently the roentgen-

ologist did not wish to commit himself because his final diagnosis was "Effusion into the right knee joint." The other x-ray diagnosis was "Effusion into the right pleural cavity." The joint fluid was apparently sterile, since there was no growth upon culture. The patient's illness was febrile during this stage, his temperature varying from 99° to 103°. He was given supportive therapy in preparation for orthopedic correction of the knee. About a week after he was admitted something else happened; he became very definitely jaundiced with an icteric index of 25. I presume he became rapidly worse following this because he was given transfusions and glucose and did not improve. On his 22nd hospital day he suddenly vomited 250 cc. of clotted blood. He apparently went into shock after this, characterized by rapid pulse, rapid respirations, pulmonary rales, and thereupon died.

Here we have an illness with a lot of apparently unrelated phenomena involving numerous systems. The patient started off with an initial illness of fever, skin rash, cough, and hemoptysis. He developed pain in his leg with sterile effusion, and developed a terminal febrile illness. I don't know how long he was having temperature up to 103°, but apparently for 22 days, anyway. He developed fluid in his abdomen and fluid in his extremities and yet I think we can eliminate *congestive heart failure* as a cause of this. If we could forget this knee for a moment, here's an individual who five years ago had some type of jaundice and had an acute illness 18 months ago, during which he became questionably jaundiced. He may have been jaundiced off and on during the ensuing months, certainly he was jaundiced during his terminal illness. Furthermore, he developed free fluid in the abdomen, edema of the legs, and vomited blood. All of those things fit in very well with *cirrhosis of the liver*. Cirrhosis of the liver is notoriously encountered at autopsy in individuals who have some other illness that attracts the clinicians attention. I think cirrhosis of the liver is something we'll put down as a possibility, albeit somewhat remote. This would explain the vomiting of blood — from esophageal varicosities. It would explain the edema of the abdomen and legs and the periodic jaundice. It is proper, in recent years, in any obscure case, to always bring up the possibility of *periarteritis nodosa*. Perhaps this should be brought up here. After all, periarteritis nodosa is a disease which sometimes explains otherwise un-

explainable phenomena. It can involve the kidneys, and does in about 80 percent of cases; it can involve the heart; it involves the liver in about 65 percent of individuals that have it; it involves the gastro-intestinal tract in about half of the cases; and, it involves the joints occasionally. I've seen it, on one occasion, in which the articular surfaces were involved. Furthermore, it sometimes involves the central nervous system. Well, if we have a disease that involves all these systems we might easily grasp on to it as explanation of widespread bizarre symptoms. Yet, on the other hand, this doesn't look much like periarteritis nodosa. The patient had a leukopenia, and the vast majority of people with periarteritis have elevated counts — up to 20 or 30 thousand. Furthermore, most of them have eosinophilia and most of them have hypertension. He didn't have any of those. Let's just put that aside for the moment. There are a few other things that I think should be mentioned in passing. If all these signs and symptoms could have been of relative unimportance except those pertaining to the knee, might this case be one of *osteogenic sarcoma*? Could his febrile illness of 18 months ago have been an insignificant thing from which he spontaneously recovered? This is all very well except that people who die of osteogenic sarcoma would be expected to have definite x-ray evidence of it long before their death. I think that this possibility can be eliminated. Certainly this is not an ordinary septic joint; the fluid was not purulent, I presume, and no organisms could be cultured. This then is not *gonorrheal arthritis*.

In certain parts of California — in the San Joaquin Valley, Antelope Valley, in Arizona and Western Texas, there occurs a disease in endemic form, which many of you know — *coccidioidomycosis*. This disease begins as a febrile illness and, initially, respiratory symptoms are most prominent. People sometimes are but very slightly ill and the majority of them don't even see a doctor. Some patients become quite ill with a rather severe cough, pain in the chest, many times with a skin rash. This rash is erythematous and of the type seen in erythema nodosa. The disease progresses for a varying length of time and most people get well. Others may go ahead and develop more permanent lesions in the chest even including small cavities. The roentgenologist can often recognize the true nature of these lesions because of the very little infiltration

around the cavity. Pulmonic lesions, including cavities, that occur in coccidioidomycosis do not make a person very sick but rather seem to confer some immunity to that individual in protecting him from the disseminated form of the disease. A very small percentage of people with coccidioidomycosis develop the disseminated form of the disease. Widespread granulomatous lesions appear in various parts of the body. Notorious among the distant remote sites of involvement are the bones. The lesions may also involve joint surfaces to produce effusion. The disease itself is associated with fever. Another thing that can happen is hepatic involvement. The disseminated form of the disease often involves the central nervous system. Spinal fluid findings usually include a cell count of something like 800 to 1000 white cells with a slight predominance of lymphocytes, a paretic type of colloidal gold curve, and with some increase in total protein. The diagnosis of coccidioidomycosis appeals to me more than any other one and it explains the symptoms which this patient presented. So, without further apology, I'll make a diagnosis of coccidioidomycosis in this case, the explanation of death being meningitis. Rupture of esophageal varicosities due to hepatic involvement by coccidioidomycosis is a possibility.

CLINICAL DISCUSSION

DR. LACHMAN: So far as the chest film is concerned, we have a vanishing effusion with some increased markings. There is nothing pathognomonic here — certainly no signs of any tuberculosis, coccidioidomycosis or histoplasmosis. Five years ago a diagnosis of tuberculosis would have been considered sufficient; however, we now almost invariably say — or coccidioidomycosis or histoplasmosis, since these three diseases may produce identical changes from the x-ray standpoint. There is one thing I might add here and that is the impression of a pathological fracture in the tibia. That would fit into the story, wouldn't it? The protocol states that for a time the patient had only mild pains around the knee joint, slight swelling in the lower lateral aspect of the right side, moderate tenderness, and so on, but that all of a sudden, four months later, he fell and struck his knee a rather trivial blow with an abrupt increase in the swelling accompanied by redness and heat of the overlying skin. From that moment on he was almost completely disabled. Now, this film isn't very clear, but it still gives

me the idea of a pathological fracture in addition to the destructive process that is present in the knee joint.

PATHOLOGIC DIAGNOSIS

DR. HOPPS: Dr. Rucks, your presentation has been most instructive and accurate in all important respects. You are to be commended at arriving at a final diagnosis which was correct in all points, despite many deficiencies in the history. I'll briefly review the findings at autopsy, show several microscopic sections and then ask Dr. Gafford to say a few words about the general nature of coccidioidomycosis and comment on several points which bear direct relation to this particular case. At the time of autopsy, in the deep bursae of the right knee approximately 250 cc. of purulent fluid was recovered. In the vicinity of the medial condyle of the tibia an additional 100 cc. of pus was recovered. This is the region in which Dr. Lachman postulated a pathologic fracture. The circumference of the right leg at the knee was 44 cm. The left leg at the knee was 38 cm., which gives a more accurate concept of the degree of swelling which was present. There was about 750 cc. of serous fluid in the peritoneal cavity, and 150 cc. in the right pleural cavity. The associated evidence of recent weight loss suggests that this was a manifestation of hypoproteinemia — nutritional edema. The cardiovascular system was essentially normal save for slight cardiac hypertrophy, the degree of which would not be clinically significant. The lungs were markedly altered. The left weighed 1190 gm., and the right 1100 gm., (normal 325 and 375 gm.). In this case, the marked increase in weight represented, for the most part, inflammatory exudate. This much inflammatory exudate, or edema fluid for that matter, is approaching the critical limit beyond which effective respiration can not continue. Histologically, numerous sections reveal the characteristic pattern of inflammation produced by *coccidioides immitis*. This characteristic reaction is not greatly different from ordinary bronchopneumonia except for the presence of giant cells and the presence of the specific organisms. As a matter of fact, these pulmonic lesions do represent a type of bronchopneumonia. The spleen weighed 825 gm., in contrast to the normal average weight of 150 gm., and there was evidence of coccidioidal infection there too. The kidneys were each enlarged approximately one and one-half times, weighing 225 and 250

gm., respectively. They too showed evidence of this infection. The liver was reduced to about two-thirds its normal weight and the reduction in size seemed to be a little bit greater even than the reduction in weight, indicating an increased density. On external and on cut surfaces there were irregular lobulations up to 1 cm. in diameter, so that the gross appearance was that of multilobular cirrhosis, i.e. Laennec's cirrhosis. There was no clinical evidence of hemorrhage during the last 20 hours or so of the patient's life and, at autopsy esophageal varices were not evident. Even when these are known to be present they may be difficult to demonstrate at autopsy because they completely collapse after death. The absence of any other lesion in the gastro-intestinal tract from which hemorrhage could have occurred makes it likely that Dr. Ruck's assumption was correct.

The slides which I shall project will demonstrate that this patient had disseminated coccidioidomycosis, with extensive involvement of the lungs and involvement also of the spleen, kidneys, liver, and bones of the right knee. It is very difficult to determine whether or not the cirrhosis may have been an effect of coccidioidomycosis. Because of the age of the granulomatous lesions in the liver I believe it most likely that the cirrhosis probably antedated the coccidioidomycosis and probably contributed to it. In evaluating the pathologic findings of this case we find that the pattern of involvement is a conventional one as compared with a large series of cases reviewed by Wiley Forbus and his associates at the Army Institute of Pathology. In this series lungs were involved in approximately 90 percent of the cases, lymph nodes in about three-fourths of the cases, and bones in approximately one-half of all cases of disseminated coccidioidomycosis. I think that was one of the important clues to the solution of this case, that coccidioidomycosis, in its disseminated form, involves many tissues, but involves the bone in a high percentage of cases. Leptomeninges were involved in approximately one-third of Forbus' cases and leptomeningitis was a common cause of death.

DR. GAFFORD: We have prepared a chart that rather graphically illustrates some points Dr. Rucks made in relation to coccidioidomycosis and which depicts the course of coccidioidomycosis from the time

of infection or primary phase, as it is usually called. In by far the greatest majority of cases, as indicated here, the disease does proceed to complete resolution. Since this phase of the disease is often clinically silent it is not known how many cases actually occur. Since approximately 95 percent of persons that live in an endemic area of coccidioidomycosis develop positive skin tests after they have lived there for 10 years, it is assumed that the number of asymptomatic cases of primary coccidioidomycosis is quite high. Approximately 20 percent of persons with the primary phase will develop residual lesions in the lungs, and by that I mean lesions that will persist after the acute episode has subsided. These residua may then take any one of several courses; they may completely resolve and it is astounding that cavities may completely resolve, leaving practically no trace whatsoever. From these residual fibrosis and calcification can result, and that is frequently seen. From the primary phase also a very small percentage of patients may proceed directly into the disseminated phase. It is possible too that the "residua", even after some calcification, may lead to dissemination and this after a latent period of as long as six months. It is interesting to note that this patient was at the approximate upper limit of his latent period to develop dissemination if we assume that dissemination occurred at the time of the initial swelling of his knee.

Clinically it may be very difficult to differentiate coccidioidomycosis from tuberculosis, for the reason that tuberculosis can involve the lungs, the bone, the central nervous system, etc., just as in this case. For a while roentgenologists had a great deal of difficulty in identifying this disease, but I think that their difficulty is less now since they have had opportunity to see a large number of cases of coccidioidomycosis, particularly those with cavities. Most people who have tuberculosis cavities have an area of infiltration around the cavity, whereas in coccidioidomycosis the cavity is usually surrounded by a very thin shell, without peripheral infiltration. Furthermore, in people with cavities, repeated failure to demonstrate tubercle bacilli is of great significance. Certainly this case depicts the difficult aspects of diagnosis and illustrates the variety of different diseases under which disseminated coccidioidomycosis may masquerade.



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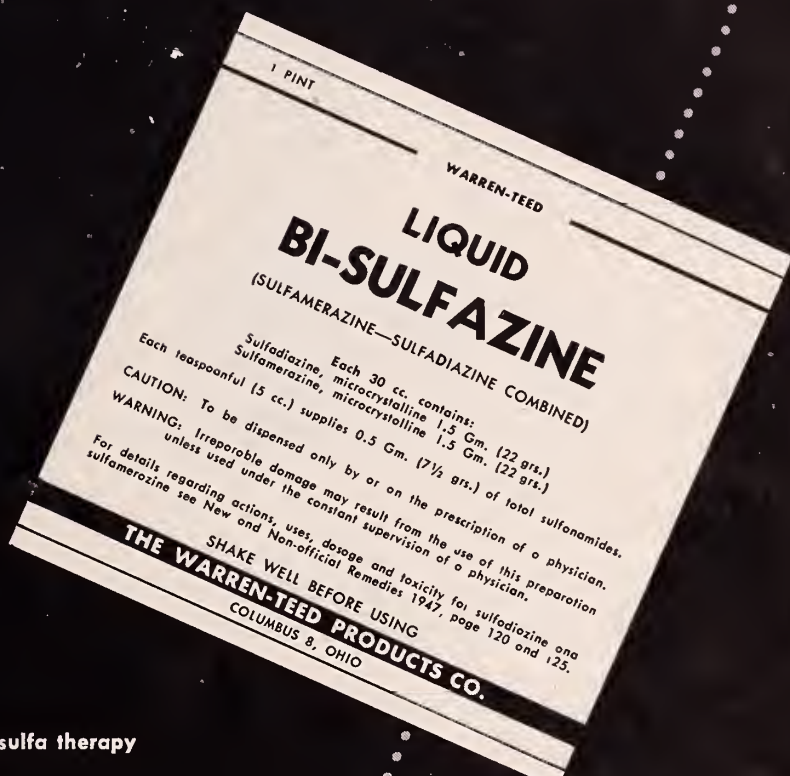
Certain significant observations came to light in considering the factors involved in the defeat of President Truman's Reorganization Plan No. One.

1. The Physicians of this country can exert a tremendous influence for the RIGHT when they are awakened and aroused.
2. Most of the Senators other than those on the Committee, were entirely unacquainted with the content and potential dangers in Reorganization Plan No. One two weeks before it became up for vote.
3. Personal contact in Washington with the members of the Senate in discussing the nature and provisions of the Plan was the greatest single factor in determining its overwhelming defeat.
4. There are still many senators of vision and courage representing the People — vision to see subtly concealed and hidden hazards to the future welfare of our nation, courage to vote as they deem right without fear of party pressure or loss of presidential favor.
5. The necessity for us to be constantly on the active alert for other similar legislation such as S.1411 providing \$35,000,000 for medical care to school children without regard to their economic status and S.1453 offering subsidies for Medical Education and Hospitals whereby the Government may ultimately control that which it subsidizes.

We are proud indeed that Oklahoma, through its active Public Relations Program, had a vital part in defeating this insidious attempt to foist upon the American people another hidden socialistic scheme.

George H. Harrison
President.

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 by prescribing this
 low-toxicity sulfonamide
 Bi-Sulfazine . . .
 always prescribe
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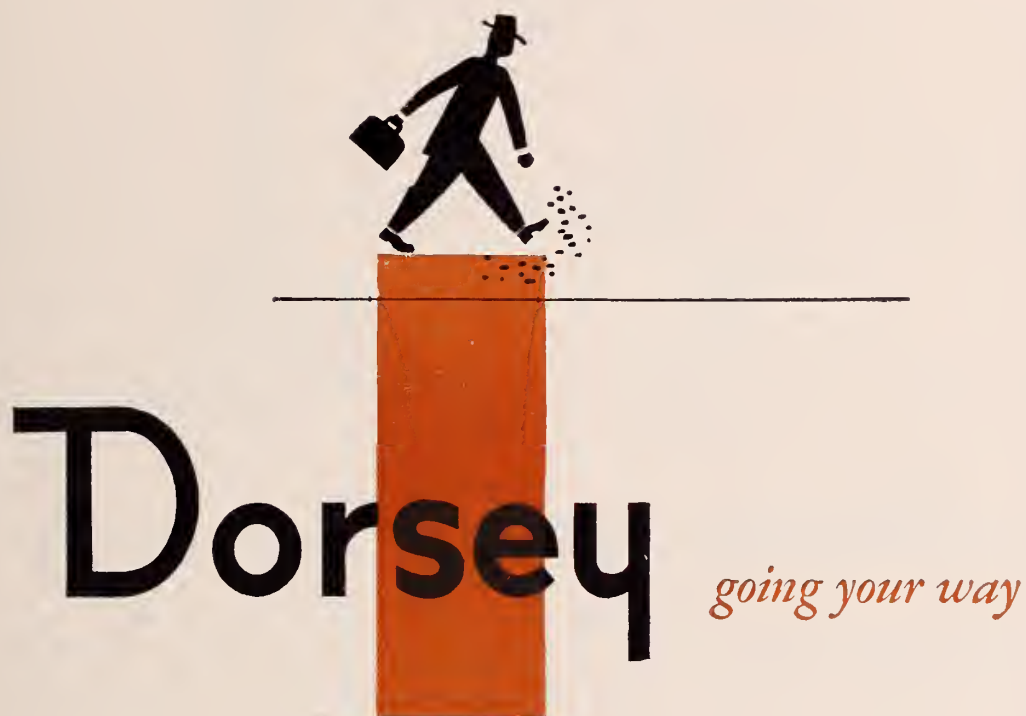
Special Article

The Medical Assistants Society, which is holding its Second Annual Meeting in Oklahoma City in October, should have our undivided support. The purposes behind this organization and the possibilities for self improvement of its members, thereby increasing the value of their services to the profession and the public, should be encouraged.

The young women who are in the reception rooms, laboratories, business offices, etc., are rendering a necessary part of the total effort which goes into properly caring for the medical needs of our patients. Their contact affects the broad picture in some degree for better or for worse; theirs is an opportunity to create favorable public relations.

We must urge the members of our own offices to become a part of such an organization and permit them time to do so.

A program of the meeting appears in this issue.



FOLLOWING a parallel route to a similar destination, the ethical pharmaceutical maker necessarily keeps the progress and direction of scientific medicine constantly in view.

For a closer look at medicine's progress and full comprehension of its implications, the Smith-Dorsey Company has expanded its research facilities, secured increased research grants and added research personnel.



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AQUEOUS SUSPENSION OF ESTROGENIC SUBSTANCES • DORSEY
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THE SMITH-DORSEY COMPANY • Lincoln, Nebraska

BRANCHES AT LOS ANGELES AND DALLAS

PUBLIC RELATIONS REPORTER

THOUSANDS SEE EXHIBIT

Oklahoma State Medical Association's educational health exhibit has been viewed by approximately 300,000 Oklahomans during the past month and will be seen by many additional thousands during October.

The exhibit, which was prepared by the Public Policy Committee, has been shown at the Garvin County Fair, September 7 to 9; the Seminole County Fair, September 14 to 16; the Tulsa State Fair, September 18 to 22; and the Oklahoma State Fair in Oklahoma City, September 24 to 30.

This month the exhibit will be displayed at the Oklahoma Free State Fair in Muskogee, October 2 to 9; the Oklahoma Education Association Convention in Oklahoma City, October 13 and 14; and the Made-in-Oklahoma Exposition in Oklahoma City, October 26 to 30.

Members of the Women's Auxiliary throughout the state are serving as hostesses at the exhibit booths. Much of the credit for the success of this project can be given to the Auxiliary's assistance.

The exhibit compares health conditions in Oklahoma with neighboring states and also points out the advantages of voluntary health insurance and the free enterprise system over compulsory health insurance. National Education Campaign pamphlets are being distributed at the exhibit.

A special attraction at the exhibit booths is an essay contest for junior and senior high school students. Entry blanks and rules for the contest are given out at the booth.

The first prize in this contest is a \$100 U. S. Savings Bond. A \$50 bond is given for second place, and a \$25 bond for third. November 1 is the deadline for entering the contest and announcement of winners will be made about December 1. Five well known Oklahomans, including the State Commander of the American Legion and the president of Oklahoma Education Association, have consented to serve as judges.

AIDS FOR SPEAKERS

Materials to help you prepare talks on compulsory health insurance are available through the Executive Office. Many organizations which suspended activities during the summer are now meeting regularly.

Have you checked to see if someone has discussed the dangers of compulsory health insurance and the social welfare state before the important organizations in your community? Write to the Executive Office if you want Speaker's Kits, pamphlets for distribution to audiences, or the names of outstanding speakers in your area.

"THE DOCTOR"

The National Education Campaign poster which displays the Fildes painting "The Doctor" should be in every physician's office in the state.

In addition, the poster can be effectively displayed in hospital lobbies, drug stores, banks, and business offices — any place where people oppose compulsory health insurance as a dangerous step toward a socialistic form of government. Write the Executive Office for as many copies of the poster as you can use. They're available in two sizes — 20 x 19 inches or 36 x 35 inches.

AUXILIARY PUBLIC RELATIONS

Plans for providing trained speakers on the subject of compulsory health insurance have high priority on the program of the Women's Auxiliary this year. All County Auxiliary Public Relations Chairmen are receiving material on the subject from Mrs. W. R. Cheatwood, Duncan, State Public Relations Chairman, and from the National Education Campaign.

There now are 32 County Auxiliaries, representing 50 counties, and the group has plans for further expansion in the near future.



For the public good

The health and well-being of at least 1,000,000 Americans depends upon their discovery and treatment as diabetics. The American Diabetes Association is directing the year-round Diabetes Detection Drive to find the "1,000,000 unknown diabetics" and guide them to their own physicians for treatment.

THE AMES ***Selftester*** (TRADEMARK) **AT ALL DRUGSTORES**
brings those with glycosuria to you for diagnosis.

A simple home screening test for urine-sugar, the Ames Selftester* is a new approach to this detection problem. Like the clinical thermometer, it is sold directly to the public through drugstores. Also like the thermometer, it does not give a diagnosis, but only a warning.

the directions state:

1. The Selftester does not diagnose diabetes or any other disease. Its sole function is the detection of sugar (glucose) or sugar-like substances.
2. If reaction is positive, see your doctor at once. Sugar in your urine does not necessarily mean you have diabetes (nor does a negative result definitely exclude the presence of disease). But only your doctor, by medical examination and by additional laboratory tests, can tell why you show sugar.

THE AMES ***Selftester*** to detect } **THE DIABETIC**
CLINITEST® to control
Brand • Reagent Tablets

*Approved by the Council of the American Diabetes Association and accepted for advertising in publications of the American Medical Association.



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SECOND CIRCUIT SET FOR OCTOBER

The second circuit in the postgraduate course in internal medicine course will open in eastern Oklahoma October 3, 1949. The first lecture will be given in Poteau Monday night, October 3, and the succeeding lectures will be given in McAlester Tuesday night, October 4, Okmulgee Wednesday night, October 5, Muskogee Thursday night, October 6, and Tahlequah Friday night, October 7.

The lectures will continue in each center for 10 consecutive weeks with the exception that the course will be postponed for one week, beginning October 24 through the 28th, so that physicians may attend the Oklahoma City Clinical Society meeting. The lectures will be resumed the week of October 31 and will continue through December 16. The enrollment to date has been very excellent.

Doctor Becker closed his first circuit in Northeastern Oklahoma September 23, and all reports from that area give high praise to Doctor Becker's teaching ability. The attendance was exceptionally good in spite of the heat and vacations.

BASIC SCIENCE BOARD APPOINTED BY GOVERNOR

Five new members were recently appointed to the Basic Science Board by Governor Roy J. Turner. Newly appointed members, present members and the expiration date of their terms are as follows:

Clinton Gallaher, M.D., Shawnee, 1954; Homer S. Marsh, Ph.D., Norman, 1953; Howard C. Hopps, M.D., Oklahoma City, 1954; H. W. Orr, Ph.D., Stillwater, 1952; R. Vance Toler, D.O., Shawnee, 1953; Otto M. Smith, Stillwater, Ph.D., 1951; and Sterling Cooley, D.C., Tulsa, 1950.

The board examines all applicants for licenses to practice any of the healing arts.

PHYSICIANS — DENTISTS TO RECEIVE CANCER BULLETIN

The Committee on Professional Education of the Oklahoma Division of the American Cancer Society announces that the last issue of the Cancer Bulletin will be sent out in December.

With the co-operation of the State Health Department, the Committee is subscribing to The Cancer Bulletin (formerly the Texas Bulletin) for all physicians and dentists in the State. It will be sent out six times a year. This new bulletin, well illustrated, is an exceedingly fine one and now has a wide circulation throughout the country.

OKLAHOMA CITY PHYSICIAN LECTURES IN ALASKA

Serving as an instructor at the first Alaska Medical Mission conference was Edward N. Smith, M.D., obstetrician and gynecologist of Oklahoma City. Dr. Smith was one of six specialists selected by the American Medical Association to lecture at the Alaska medical clinic, which was held at Anchorage, Alaska, from July 19 to August 2.

The clinic was designed primarily for Alaska Native Service doctors who are in charge of remote hospitals in the territory. Also in attendance were medical officers stationed in Alaska with the U.S. Air Force and Army and personnel of the Alaska Department of Health. The meeting was sponsored by the American Medical Association, U.S. Air Force, and the Alaska Native Service, Department of the Interior.

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in the Respiratory and Circulatory Emergencies
of Intravenous Barbiturate Anesthesia.

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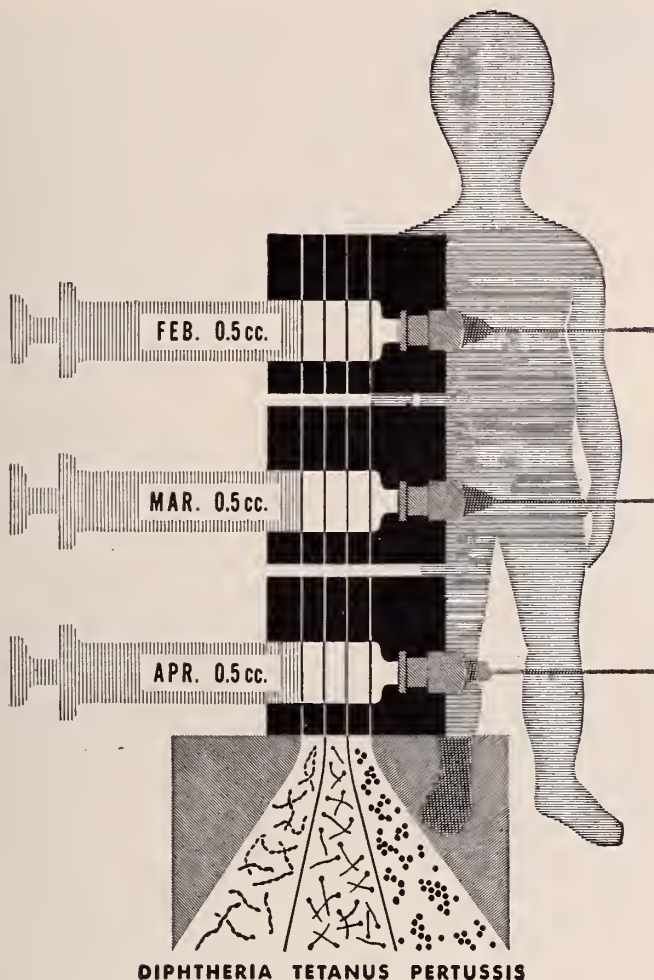
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Bilhuber-Knoll Corp. Orange, N. J.



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"... a decrease in the number of injections will go far to make the practice of pediatrics more tolerable." (Fischer: J. A. M. A. 134:1064, 1947)

Office routine simplified . . . each injection is the same—0.5 cc.

Patient discomfort and reactions minimized

Lower expense for physicians and institutions

Easier injection because the product is exceptionally fluid

1.5 cc. vials — 1 complete immunization; 7.5 cc. vials — 5 complete immunizations.

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PROGRAM
OKLAHOMA STATE MEDICAL ASSISTANTS SOCIETY
Second Annual Convention

Skirvin Hotel

Oklahoma City

FRIDAY**October 21, 1949**

8:00 P.M.—Oklahoma County girls hostesses at reception honoring out of city guests, Skirvin Hotel.

SATURDAY**October 22, 1949**

9:00 A.M. to 1:30 P.M.—Registration, Skirvin Hotel.

1:30 P.M.—Meeting called to order, President Alma Hall, Tulsa, presiding.

Address of Welcome, A. L. Salomon, M.D., Oklahoma City.

1:45 P.M.—Response, V. K. Allen, M.D., Tulsa.

2:00 P.M.—L. J. Starry, M.D., Oklahoma City.

2:30 P.M.—Lewis J. Moorman, M.D., Oklahoma City.

3:00 P.M.—Mrs. George H. Garrison, Oklahoma City.

3:30 P.M.—Musical favorites.

3:45 P.M.—Blue Shield.

4:00 P.M. to 5:00 P.M.—Convivial Hour sponsored by Medical Service Society.

7:00 P.M.—Dinner. Guests—Society medical advisors: George H. Garrison, M.D., Oklahoma City, President, Oklahoma State Medical Association; M. J. Searle, M.D., Tulsa; V. K. Allen, M.D., Tulsa; Robert S. Funk, M.D., Tulsa; A. L. Salomon, M.D., Oklahoma City, Byron Williams, M.D., Oklahoma City.

9:00 P.M. to 12—Dance, Persian Room, Skirvin Hotel.

SUNDAY**October 23, 1949**

9:00 A.M. to 10:00 A.M.—Registration and Organization of New Counties, Skirvin Hotel.

10:00 A.M.—Meeting called to order, President Alma Hall, Tulsa.

10:05 A.M.—Greetings, President Geneva Staunton, Oklahoma County Medical Assistants, Oklahoma City.

10:10 A.M.—Response, President Mildred Boaz, Payne County Medical Assistants, Stillwater.

10:15 A.M.—Carroll Pounders, M.D., Oklahoma City.

10:30 to 12:00 A.M.—Business meeting and election of officers.

1:00 P.M.—Luncheon. Installation of Officers, Skirvin Hotel. Guests, Society Medical Advisors; Dick Graham, Executive Secretary, Oklahoma State Medical Association.

3:00 P.M.—Viewing of Clinical Society Exhibits, Biltmore Hotel.

HAVE YOU HEARD?

G. S. Collins, M.D., a graduate of the University of Oklahoma School of Medicine, has recently moved to Prague to practice.

W. W. Cotton, M.D. and *R. W. Lowrey, M.D.*, Poteau, have recently opened a new clinic there.

Carl H. Bailey, M.D., Stroud, is one of the new directors of the Stroud chamber of commerce.

C. J. Allgood, M.D., Snyder, discussed socialized medicine at a meeting of the Snyder Rotary Club.

M. L. Henry, M.D., McAlester, addressed the McAlester Junior Chamber of Commerce on socialized medicine and following his address, the Jaycees went on record officially as being opposed to socialized medicine.

James F. Tagge, M.D., a graduate of the Washington University School of Medicine, is now associated with Paul Champlin, M.D., and J. W. Mereer, M.D., Enid.

F. W. Ewing, M.D., Muskogee, attacked the proposed compulsory health insurance as not insurance but a tax before the Lions Club of Muskogee.

Harper Wright, M.D., formerly of Oklahoma City, has moved to Chattanooga, Tenn. where he will continue his education at Erlanger hospital.

Byron W. Aycock, M.D., Lawton physician, was recently featured in an article "Who's Who in Lawton" in the Lawton Morning Press.

Robert Srigley, M.D., Hollis, recently gave a series

of health lectures at the Vinson and Hollis East Side veterans classes.

Clyde Kernek, M.D., Holdenville, explained the proposed compulsory health insurance plan at a meeting of the Holdenville Lions club.

M. L. Saddoris, M.D., Cleveland, Oklahoma, was recently awarded a wooden plaque made by the Boy Scouts in appreciation of the work he did in the interest of the camping program of that city.

Robert M. Shepard, M.D., Tulsa, was elected governor of the American College of Chest Physicians for the State of Oklahoma at the Annual Meeting of the group held in Atlantic City, New Jersey, June 2-5, 1949. Dr. Shepard's term will extend for a period of three years.

Harry F. Hightower, M.D., Hobart, has been appointed county superintendent of Health for Kiowa county.

A. Ray Wiley, M.D., Tulsa, spent three months in Europe during the summer visiting London, Rome, Vienna, Venice, Switzerland, Sweden, Norway, and Scotland.

Earl McBride, M.D., Oklahoma City, had an article on low back pain appearing in the August Rocky Mountain Medical Journal.

J. L. Wharton, M.D., Depew, spent his 76th birthday, July 27, 1949, at Russellville, Ark, where he was born. Dr. Wharton delivered a baby boy for Mrs. Elihu Burkleo of near Duncan, Indian Territory in September, 1898 reports G. A. Wharton, also of Depew.

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CAUTION: To be taken only at bedtime. Do not use at any other time or administer to infants, except upon the advice of a physician.

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OBITUARIES

WILLIAM JACKSON SAYLES, M.D.

1904-1949

William Jackson Sayles, M.D., for 12 years a Miami eye, ear, nose and throat specialist, died August 26, 1949, in a Tulsa hospital of poliomyelitis.

Dr. Sayles was born in Iowa February 19, 1904, and was graduated from Iowa University School of Medicine in 1931. He served his internship at the City hospital in St. Louis. He moved to Miami from St. Louis in 1937 and joined the Miami clinic in December, 1938. Dr. Sayles served three years as a major in the armed forces from the fall of 1942 to November, 1945.

Dr. Sayles was 32nd degree Mason, and a member of the Miami post of the American Legion. He had been secretary of the Ottawa County Medical Society for several years and was vice-councillor of District No. One.

Besides his widow of the home and parents, Mr. and Mrs. C. J. Sayles of St. Louis, a daughter, Lucy Sayles, and three sons, Charles, Rodney and Edward, all of the home, survive.

A. B. STEPHENS, M.D.

1904-1949

A. B. Stephens, M.D., Seminole, died August 15 in an Ada hospital.

Dr. Stephens was born in Red Oak in 1904. He was graduated from McAlester high school and attended the University of Oklahoma, graduating from medical school in 1927.

Active in medical organizations, he was also a member of the Presbyterian church and was affiliated with Alpha Tan Omega social fraternity and Phi Beta Phi medical fraternity.

Survivors include his widow, a son, Paul Bryan, his parents, one brother and one sister.

JOHN STEPHENS ROLLINS, M.D.

1886-1949

John Stephens Rollins, M.D., Pragne, died July 18 after a long illness.

Dr. Rollins had practiced medicine in Okfuskee and Lincoln counties for the past 40 years. He built the Rollins hospital in Pragne in 1928.

Dr. Rollins was born December 19, 1886 at Clanton, Alabama, where he attended grade and high school. He was graduated from the School of Medicine at the University of Tennessee at Memphis in 1909. He also attended the St. Louis College of Physicians and Surgeons and the College of Medicine and Surgery at Kansas City, Mo. He came to Paden, Okla. in 1909 and moved to Pragne in September, 1927.

He was a member of the First Christian Church, Chamber of Commerce, Lions Club, Blue Lodge Mason and Thirty-second Degree Mason, a past president of the Okfuskee and Lincoln County Medical Societies and at one time delegate, Oklahoma State Medical Association. Survivors are his widow of the home, one daughter and one son, four grandchildren, one sister and one brother.

STERLING P. STROTHER, M.D.

1867-1949

Sterling Price Strother, M.D., Oklahoma City, died August 2, 1949.

Dr. Strother was born July 21, 1867 and was graduated from Beaumont Hospital Medical College, St. Louis, in 1901. He practiced in Altus before coming to Oklahoma City in 1919. Dr. Strother retired from practice several years ago because of ill health.

Dr. Strother is survived by his widow of the home, one daughter and one son and several grandchildren and great-grandchildren.

CLASSIFIED ADS

FOR SALE. Lucrative practice open in Colorado. Home, furniture, and office, and equipment for sale by widow. Write Key R, care of The Journal.

LOCATION WANTED. Internist with three years specialized training Temple University desires association with five to seven man group. Married, Veteran. Available for interview immediately. Write Key P, care of The Journal.

LOCATION WANTED. Retired active physician-surgeon wishes steady appointment in public or private institution. Small salary. Write Key Z, care of The Journal.

WANTED. Experienced general surgeon to be associated with a well established general practitioner. Excellent hospital facilities and income. Give age, qualifications, and experience in first letter. Write Key W, care of The Journal.

POSITION WANTED. Accountant for hospital or clinic. Experienced in office management, costs, payrolls and taxes. Hospital references. Write Key P, care of The Journal.

TWENTY-FIVE YEARS AGO

Dr. P. P. Nesbitt, Muskogee, is attending the clinics at Chicago.

Dr. J. Hutchings White, Muskogee, is attending the clinics at Chicago.

Dr. Leila E. Andrews, Oklahoma City, returned recently from a three months' trip to Europe.

Dr. E. B. Dunlap, Lawton, and family, have returned from an auto trip to various points in Colorado.

Dr. and Mrs. Thomas W. Dowdy, Wilson, have returned from a vacation spent at various Texas points.

Dr. and Mrs. Charles E. Barker, Oklahoma City, returned recently from an auto trip to New York and Boston and other points in the East.

Garfield County Medical Society met September 19th, with a good attendance; the feature of the meeting being a paper on "The Role of Iodine in the Prevention and Treatment of Goiter," by Dr. Paul B. Champlin, Enid.

in hay fever...

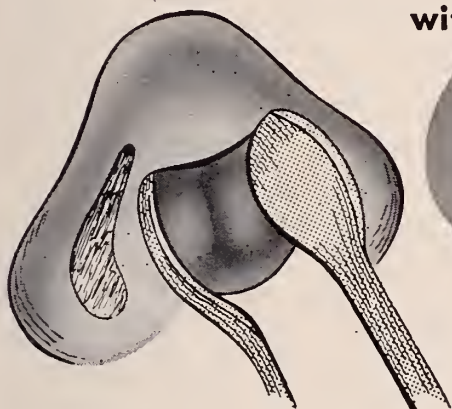
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- ...Aeration Promoted
- ...Drainage Encouraged

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This powerful vasoconstrictor acts quickly to shrink engorged mucous membranes, restoring easy breathing, and promoting free drainage.

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Neo-Synephrine does not lose its effectiveness on repeated application . . . It may be employed with good results throughout the hay fever season . . . It is notable for relative freedom from sting and absence of compensatory congestion . . . Virtually no systemic side effects are produced.

Supplied as:

¼% and 1% in isotonic saline solution—1 oz. bottles.

¼% in aromatic isotonic solution of three chlorides—1 oz. bottles.

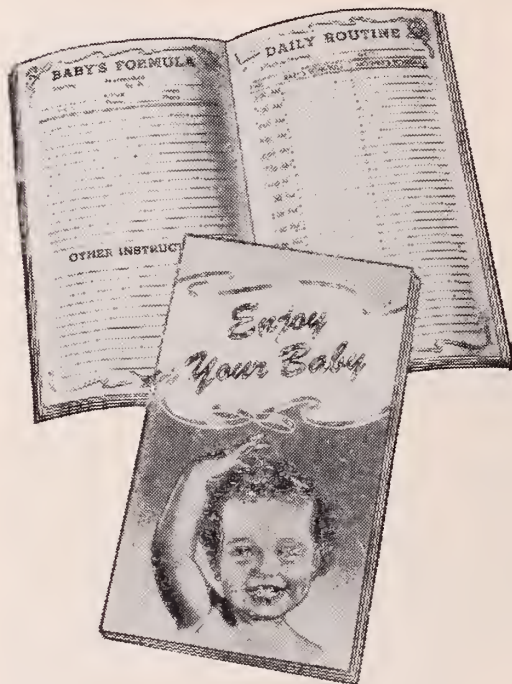
½% water soluble jelly—½ oz. tubes.



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A BIG TIME-SAVER FOR EVERY DOCTOR



This handy booklet for new mothers was "built to doctors' orders". It contains blank forms for filling in your instructions and formulas.

It provides a permanent case-history record. A memo will bring you a sample...or as many as you want for your daily practice... without obligation.

Many doctors are prescribing "Daricraft Homogenized Evaporated Milk". It is always uniform, safe, sterilized, easy to digest, and high in food value and minerals. Daricraft contains 400 U. S. P. units of Vitamin D per pint.



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BOOK REVIEWS

THE AMERICAN NURSES DISTIONARY. Alice L. Price, B.S., R.N. W. B. Saunders Company. Philadelphia, 1949.

For the first time, there is a dictionary compiled specifically for the nursing profession by a nurse. The author is well qualified as to education and experience, and the result is a very attractive, blue-bound volume which will be an important addition to the literature of the nursing profession.

Reviewing a dictionary has certain understandable limitations, especially in evaluating the author's viewpoint and purpose. However, in the preface, Miss Price explains that her principal objective has been to produce a dictionary designed primarily to meet the requirements of nurses. "Most students," she writes, "enter a school of nursing without having had several years of university work and because of this fact, often find it extremely difficult to understand the complex and highly technical terms used in medicine and nursing."

Based on an extended survey of nursing texts to determine which terms are necessary for the nurse to know, those included were used in manuscript form for 16 months by a class of 65 students who showed improvement in vocabulary and in ability to understand lectures by attending physicians and surgeons. Non-medical terms used in sociology, professional adjustments and other less technical subjects are included. According to the publisher there are "no time-wasting cross references", but an instructor who encourages the student's initiative and interest in studying will properly question this omission. Another feature emphasized is that no other dictionary gives the pronunciation for each syllable of the words defined. Commonly used prefixes are given so that newly coined words may be learned by discovering the meaning of the elements entering into them. The usual abbreviations, symbols and tables are included.

In a field as constantly changing and volatile as drug therapy, a difficult problem is presented to the author. For this reason, it would be interesting to know the criteria by which a drug was included in the approximately 25,000 words defined. Heparin, for example, is defined while dicumarol, probably of equal importance, is omitted as is also the specific, thiouracil.

Of interest to instructors is the Vocabulary Guide which is a completely separate outline to assist teachers in orienting students for the vocabulary of specific courses by listing unfamiliar words according to the subject under which they may first be needed. Such an outline would be of particular value in schools which do not have a basic course in terminology.

Considering the dictionary from the nurse's viewpoint, it is streamlined, of convenient size, printed on good quality paper with excellent type, thumb indexed for quick reference, clear in definition and concise in presentation. Supplemented by a standard medical dictionary for additional reference, it should fill a need unique to the student nurse.—Mrs. Helen Wollery, Medical Librarian, Wesley Hospital and Oklahoma City Clinic; instructor in medical terminology and library orientation, Wesley school of nursing.

The 32 hospitals now under construction by the Veterans Administration contain 13,712 beds, 10,947 of them for general medical purposes.

The Veterans Administration at the present time has 30 hospitals in the planning stage which will add 20,200 beds to those already available.

MEET OUR CONTRIBUTORS

William H. Doyle, A.B., M.D., Muskogee, is the author of "The Treatment of Herpes Zoster" in this Journal. A graduate of Washington University, St. Louis, Mo. in 1934, he limits his practice to his specialty, dermatology and syphilology. He is a member of the Academy of Dermatology and Syphilology.

M. S. Ungerman, M.D., Tulsa, wrote "The Electroencephalogram in Severe Head Injuries With Tantalum Cranioplasty". He was graduated from the University of Oklahoma School of Medicine in 1945 and limits his practice to his specialty, neuropsychiatry.

Lucien M. Pascucci, M.D., Tulsa, has an article on "Intra-Ventricular Brain Tumors" in the Journal. Dr. Pascucci, who limits his practice to his specialty, radiology, is a graduate of the Yale University School of Medicine in 1934. He is a member of the American College of Radiology, American Roentgen Ray Society, and Radiological Society of North America. He has been certified by the American Board of Radiology and before coming to Tulsa he was associated with O'Reilly General Hospital, Springfield, Mo., and the Trudeau Sanitarium and Saranac Laboratory, Saranac Lake, New York.

Robert A. Hayne, M.D., Tulsa, is one of the authors of "Newer Concepts of Epilepsy". He was graduated from the University of Iowa in 1940 and limits his practice to his specialty, neuro-surgery. He has been certified by the Board of Neurological Surgery. Before coming to Tulsa he was instructor in surgery at the University of Iowa, Iowa City, Iowa.

Tom R. Turner, M.D., Tulsa, is the co-author of "New Concepts of Epilepsy" in this Journal. Dr. Turner was graduated from Baylor University College of Medicine and received his degree as master of science in neurology and psychiatry at the University of Minnesota. He limits his practice to his specialty, neurology and psychiatry.

George Winn, M.D., Oklahoma City, is a joint author of "A Simplified Method of Diagnosing Peptic Ulceration and Determining Activity" which appears in the Sept. Journal. Dr. Winn was graduated from Oklahoma University in 1943 and specializes in internal medicine. He is a member of Phi Chi and Alpha Tau Omega. He completed a two year residency at Will Rogers Hospital, Oklahoma City, in July of 1947.

Turner Bynum, M.D., F.A.C.P., Oklahoma City, is co-author of "A Simplified Method of Diagnosing Peptic Ulceration and Determining Activity". He was graduated from Northwestern University in 1934 and limits his practice to his specialty, internal medicine. He is a member of the American College of Physicians and has been certified by the American Board of Internal Medicine. Before coming to Oklahoma City, he practiced in Chickasha from 1938 to 1943 and served in the United States Navy from 1943 to 1946.



No Test Tubes • No Measuring • No Boiling

Diabetics welcome "Spot Tests" (ready to use dry reagents), because of the ease and simplicity in using. No test tubes, no boiling, no measuring; just a little powder, a little urine—color reaction occurs at once if sugar or acetone is present.

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SUGAR IN THE URINE

FOR DETECTION OF
ACETONE IN THE URINE

SAME SIMPLE TECHNIQUE FOR BOTH

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TWENTY WAYS TO KILL YOUR ORGANIZATION*

1. Seldom, if ever, go to a meeting.
2. If you attend, find fault with the work of the officers.
3. Never accept an office. It is easier to criticize than to do things.
4. If asked by a chairman to give your opinion regarding some matter, tell him you have nothing to say. But say plenty after the meeting.
5. Do nothing more than is absolutely necessary; but when other members roll up their sleeves and willingly and unselfishly use their ability to help matters along, howl that the Association is run by a clique.
6. Squawk about your officers, but never allow yourself to be nominated for one.
7. When a banquet is given, tell everybody money is being wasted on blowouts which make a big noise and accomplish nothing.
8. When no banquets are given, say the Association is dead and needs a can tied to it.
9. Don't tell the Association how it can help you; but if it doesn't help you, resign.
10. If you receive service without joining, don't think of joining.
11. If the Association doesn't correct abuses in your neighbor's business, howl that nothing is done.
12. If it calls attention to abuses of your own, resign from the Association.
13. Keep your eye open for something wrong, and when you find it, yelp.
14. At every opportunity threaten to quit and get your friends to resign.
15. When you attend a meeting, vote to do something and then go home and do the opposite.
16. Agree to everything said at the meeting and disagree with it outside.
17. When asked for information, don't give it.
18. Cuss the Association for incompleteness of its information.
19. Get all the Association gives, but don't give it anything but hell.
20. Kick about the cost of membership even though you spend as much as an entire year's dues on the World Series or a "Little party".

*The above has appeared in a number of trade association publications. We reproduce it for your interest.

DIABETIC DETECTION DRIVE

OCTOBER 10-16, 1949

- Purpose:** To detect — by urine sugar tests — unknown diabetics.
- Why?** Prevention of morbid complications of the unknown and untreated diabetic. About one of every 100 people have unknown diabetes.
- Sponsored By:** The American Diabetes Association, approved by the American Medical Association and State and County Societies.
- What Can Doctors Do?** 1. Make sugar tests FREE for all applicants during DDD Week, October 10-16, 1949.
2. Encourage as many as possible to make their own tests or ask their own physician to do the tests.

ANNOUNCING THE NINETEENTH ANNUAL FALL CONFERENCE OF THE OKLAHOMA CITY CLINICAL SOCIETY - OCTOBER 24, 25, 26, 27, 1949

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WILLARD M. ALLEN, M.D., OBSTETRICS AND GYNECOLOGY. Professor and Head of the Department of Obstetrics and Gynecology, Washington University School of Medicine, St. Louis, Missouri

JOSEPH S. D'ANTONI, M.D., MEDICINE. Professor of Clinical Tropical Medicine, University of Tulane, Senior Visiting Physician, Charity Hospital, New Orleans, Louisiana

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|---------------------------------------|---|----------------------------------|----------------------------------|
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| Atoka-Bryan-Coal- Johnston..... | J. S. Fulton, Atoka | B. B. Coker, Durant | Second Tuesday Third Thursday |
| Beckham..... | H. K. Speed, Sayre | E. S. Kilpatrick, Elk City | Third Thursday |
| Blaine..... | W. F. Bohlman, Watonga | Virginia Curtin, Watonga | Subject to Call |
| Caddo..... | C. R. Waterbury, Apache | Edward T. Cook, Jr., Anadarko | Second Tuesday |
| Canadian..... | J. N. Goldberger, El Reno | Jack W. Myers, El Reno | First Tuesday |
| Carter..... | Roger Reid, Ardmore | Royce Means, Wilson | |
| Cherokee..... | P. H. Medearis, Tahlequah | R. K. McIntosh, Jr., Tahlequah | |
| Choctaw-McCurtain- Pushmataha..... | L. E. Gee, Broken Bow | H. D. Wolfe, Hugo | |
| Cleveland..... | T. A. Ragan, Norman | Mabelle S. Collins, Norman | Fourth Thursday |
| Comanche..... | Walter Wicker, Lawton | Charles Green, Lawton | Second Tuesday |
| Cotton..... | A. B. Holstead, Temple | Mollie Scism, Walters | Third Friday |
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| Creek..... | Frank H. Sisler, Jr., Bristow | Carl W. Bowie, Bristow | Second Tuesday |
| Custer..... | Floyd Simon, Clinton | J. H. Tisdal, Clinton | Third Thursday |
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| Garvin..... | R. H. Mayes, Lindsey | John R. Callaway, Pauls Valley | Wed. before 3rd Thur. |
| Grady..... | Joseph J. Swan, Chickasha | Harold H. Macumber, Chickasha | Third Thursday |
| Grant..... | I. V. Hardy, Medford | F. P. Robinson, Pond Creek | |
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| Harmon..... | R. H. Lynch, Hollis | C. N. Talley, Hollis | First Wednesday |
| Haskell..... | William S. Carson, Keota | C. M. Bloss, Holdenville | |
| Hughes..... | Imogene Mayfield, Holdenville | | Third Tuesday |
| Jackson..... | J. P. Irby, Altus | C. L. Tefertiller, Altus | Last Monday |
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| Tulsa..... | John E. McDonald, Tulsa Medical Arts Bldg. | John G. Matt, Tulsa | Second and Fourth Monday |
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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE STATE ASSOCIATION UNDER INVESTIGATION

As we go to press we hasten to let our members know that The Oklahoma State Medical Association is among the 20 odd state and county medical societies coming under the scrutiny of the Department of Justice through an investigation now being conducted by the F.B.I.

This is something every member of the Association should have in mind as he goes about his daily duties. The December Journal will carry more complete editorial information.

In the meantime all members should seriously consider the significance of this investigation.

THE PRESIDENT'S PAGE

This from a physician in the Indian Service adds emphasis to the President's message in this issue of the Journal and should brush the scales from our eyes.

"Being a federal employee, I am not at present eligible to belong to a state or county medical society and consequently am not a member of the American Medical Association. Also being on a federal salary I am scarcely able at this time to contribute the entire \$25 toward defeat of the vicious so-called health bill sponsored by Oscar Ewing and others. I am, however, enclosing a check for \$10, which I hope will help a little in defeating this proposed legislation. I know at first hand what federal medicine does to a doctor, and I know what it does to patients."

LET THE GUILTY TAKE NOTICE

The following from the August, 1949, Newsletter of the American Society of Anesthesiologists signed by H. Boyd Stewart, M.D., Tulsa, has been reprinted in various medical bulletins and because of its significance in this, the most trying period in the history of American medicine, it is being copied in full for the benefit of all members of the State Medical Association.

"From many sources over the United States, I am hearing increasingly numerous

reports that surgeons and anesthesiologists are being cited in contempt by the public in their relations with patients who are insured under Blue Cross and Blue Shield Plans. The universal charge against the physician is that he is guilty of exploitation of his patient by accepting a fee from a prepayment plan and then charging the patient a private fee as large as he was accustomed to levy before the patient had insurance. More than half the Blue Shield Plans in operation are on an indemnity basis, permitting the physician to charge the patient a fee over and above the amount allowed by the plan. The patient who knows what legitimate and customary fees should be is becoming highly incensed at this exploitation and is asking the question, 'Who is the one insured and protected under these voluntary plans, the patient or the physician?'

"I think every physician, who may be tempted and yield to such practice, should constantly keep before him a few salient facts. Most of these voluntary plans have been sponsored by and are being operated under the supervision of the medical profession. The over-all success of the plans depends almost entirely upon the integrity and cooperation of the profession. They were instituted in the beginning to do a job, in applying the insurance principle of spreading the cost of medical care over a large group. At the present they are our biggest weapon against federal attempts at compulsory health plans. The public by and large has been well pleased with the coverage they have received.

"It behooves the individual physician, who participates in and who is reimbursed by these plans, to use discretion and observe honestly lest he inadvertently contribute to a justifiable wave of resentment. As anesthesiologists, we must not allow ourselves to become a part of such practice and above all we must assume our responsibilities for the success of medicine's effort in behalf of the patient and against federalization of the practice of medicine."

In the fight against compulsory health insurance Oklahoma has much to be proud

of. It is to be hoped that the members of the State Medical Association will not defeat the worthy cause of voluntary pre-paid medical care plans in order to collect a few paltry dollars. "The profession of medicine is a calling, not a trade."

B.C.G.

Continued publicity about vaccination against tuberculosis makes it necessary for physicians to answer the questions arising out of the stories appearing in the press. Dr. Joseph D. Aronson of Phipps Institute, who has followed a carefully controlled experiment with B.C.G. among American Indians since 1935, reports that of 3008 tuberculin negative children ranging from one to 20 years of age, 1551 were injected intracutaneously with a freshly prepared B.C.G. vaccine while 1457 comparable controls received sterile physiological salt solution. No untoward reaction was observed. The children were permitted to follow their routine habits of life with no change in their environment.

After nine to 11 years' observation, 11.7 per cent of those vaccinated showed roentgenological evidence of pulmonary pathology as compared to 29 per cent among the controls. Pulmonary lesions having the characteristics of tuberculosis appeared in 2.7 per cent of the B.C.G. vaccinated and in 14.6 per cent of the controls. In the B.C.G. vaccinated group, six have died of tuberculosis while in the control group 53 have died of this disease.

At a recent meeting of The Southern Tuberculosis Conference, Aronson closed his discussion of B.C.G. vaccination with this significant summary:

"The results of this study indicate that the use of B.C.G. vaccine is a practical procedure which can be carried out under field conditions. The use of B.C.G. vaccine is recommended at this time for tuberculin negative contacts or potential contacts, medical students, nurses and laboratory technicians. It is debatable at this time whether B.C.G. vaccine should be used among the general population until uniform methods for preparing, preserving and standardizing the vaccine have been accepted."

LONGEVITY AND THE INDUSTRIAL LABORER

In the statistical bulletin of the Metropolitan Life Insurance Company, August, 1949, shows that in the 1880's the life expectancy

was 34 years as compared to 67.16 years in 1948. This represents a slight increase over that in the general population. This remarkable increase in longevity is attributed to "the medical sciences, public health measures and to the rapid rise in the standards of living of the industrial population." Obviously, the most important factors are dependent upon medical science and sanitary engineering which is based upon medical knowledge. If industrial employes were fully apprized of medicine's contribution to their physical welfare their comfort and happiness they would not be clamoring for compulsory health insurance. The doctors are largely responsible for the obvious ignorance of medicine's contribution to human welfare and consequently responsible for the waning confidence in the profession which has done so much for human well in the past few decades. Likewise, the medical profession is largely responsible for the ill founded public belief that compulsory health insurance, which means nationalization of medicine, can result in better medical care at diminishing costs. Since Bismark originated this erroneous concept we have had seventy years to teach the people of the United States that under such a plan the reverse of their rosy expectations is inevitable.

The progress of medical science with its present problems and implications indicates that the medical profession represents a highly educated, intellectual, self-satisfied, complacent, unsuspecting industrious group suddenly awakened to the necessity of educating the public. Something which should have been going on over a period of 50 years through an intelligent grasp of our relationship to society and our responsibilities to both the people and the profession.

We are living in a very sick world. Medicine has a responsibility to the soul as well as the body. It is not too late to make a constructive contribution. We must lift the bushel and let the light shine. Though we shrink from the alternative of letting the archeologists dig us out and reconstruct our civilization from the fragments of our arts and crafts, speculate on our failure and our submersion, yet this is inevitable if we do not bestir ourselves and level off this cock-eyed marathon for the so-called four freedoms calculated to rob us of the one and only freedom which is the personal liberty to chart our own course in the pursuit of life and its abiding satisfactions.

AUREOMYCIN

Among the antibiotics aureomycin takes high rank. As experience accumulates, it must be accorded first place in versatility. Reports appearing in current medical literature testify to its wide range applicability to various infectious conditions. It grapples the common types of pneumonia almost without discrimination including the primary atypical virus pneumonias. It combats the rickettsial infections, lymphogranuloma venereum, granuloma inguinale, syphilis, gonorrhea and non specific urethritis. It promises specific action against brucellosis and contends with penicillin in saphylococic infections.

Apparently aureomycin is the most embracing of all the antibiotics and will bear watching.

HISTOPLASMOSIS

Approximately five years have passed since the relationship of histoplasmin sensitivity and pulmonary calcification was first brought to the attention of the medical profession. Much clinical and laboratory study with considerable controversy, have resulted in a series of published reports which become more convincing and command more consideration as the investigations proceed.

In a recent presentation Christie¹ reported 24 cases of histoplasmosis with 19 cases coming to complete autopsy. He also showed serial x-ray films of diagnosed cases, showing gradual clearing of pathology in the lungs. Not only were these cases roentgenologically similar to tuberculosis but the resulting calcification followed a similar pattern. These cases were reported as being tuberculin negative and histoplasmin sensitive.

It is not the purpose of this editorial to give a detailed discussion but to call attention to the fact that histoplasmosis must be considered in the differential diagnosis of pulmonary conditions especially when tuberculosis is under consideration. In the

light of what is known about this condition, the tuberculin test takes on a new significance and the question of the primary complex of first infection tuberculosis becomes more complex.

This is of importance to the physicians of Oklahoma because we are on the fringe of the proven zone of known maximum incidence of histoplasmosis, embracing Missouri, Arkansas, Kentucky and Tennessee. It should not be forgotten that many years ago Merryweather and his co-workers reported many cases of pulmonary calcifications in the Miami-Picher, Oklahoma, area which were attributed to fungus infection.

1. Christie, Amos, M.D., The Significance of Pulmonary Calcification. Given before a recent meeting of the Southern Tuberculosis Conference, Memphis, Tenn.

WHAT MAKES MEN GREAT

Of all the classes of people, physicians who must know the human organism as a composite whole, should know what makes men great. In fact, their profession is one that often gives rise to greatness. It may be that an understanding of the intricate mechanism of man constitutes the first step in its achievement. Certainly the unending study of man in relation to disease and the attempt to understand birth, life and death must keep one on the road to greatness.

Perhaps Marcus Aurelius wrote the best prescription for medical students and physicians. According to Gibbon, "At the age of twelve he embraced the rigid system of the stoics, which taught him to submit his body to his mind, his passions to his reason; to consider virtue as the only good, vice as the only evil, all things external as things indifferent."

Though he considered war the disgrace and calamity of mankind, he composed his meditations in the heat of battle, at least in the very shadow of war. Physicians who think they haven't time to apply the philosophy of life in their daily rounds and to pursue the cultural implications of their profession should mark what Marcus said.

DO YOU KNOW?

That the Mead-Johnson Company, Indianapolis, Indiana, supplied the Executive Office Library with the entire run of Journals for the year 1934? A call was made in the September Journal for issues of the Journal for the years 1917 and 1934. The Journal wishes to again thank the Mead-Johnson Company and renew its request to state physicians for copies of the 1917 volume.

SCIENTIFIC ARTICLES

THE EMOTIONS UNDER A MICROSCOPE*

C. CHARLES BURLINGAME, M.D.

HARTFORD, CONN.

It has always been one of my convictions than an individual, particularly a medical man, must never lose his humility in the face of what he does not know, and I am going to commence by saying that I have spent 41 years in the practice of psychiatry and there is still a great deal I do not know about the emotions and the emotional components in disease. I might add that I am not at all impressed with what I do know for certain.

One thing I am certain of, however, is that the body and mind, the soma and the psyche, are one and inseparable in sickness and in health; and that psychological symptomatology, along with psychological affect and effect, should be the concern of medicine and the rest of science as surely as any disease-carrying bacteria that ever wriggled under a microscope.

No one knows better than I that medical men are realistic advocates of science who are quick to say, and I have heard them say it, 'But you can *see* the bacteria. We know they're present in disease.' To them, I retort that the day will come, if it is not practically upon us at this very moment, when we will *see* physical evidence of what we now somewhat loosely refer to as a 'mental' disease!

The concept that on one hand there are 'mental' diseases, entirely psychological in cause and effect, completely separate from the body, and on the other hand, there are 'physical' diseases, with no emotional components, is as outdated as blood-letting, soothsaying, and magic incantations.

The presenting symptoms of any incapacity may be predominantly physical or predominantly psychic, but it is completely unreasonable for any physician in any

branch of medicine to treat the physical in disregard for the emotional or to treat the emotional without considering the physical.

NO SUCH THING AS A 'MENTAL' DISEASE

I have thought of graphing all diseases in a gigantic rectangle, which we might draw to illustrate the physical and psychic components of disease. We might draw a line from the lower left hand corner to the upper right hand corner, with the area above the line representing psychological components, while that below the line represents physical components.

Choosing a disease at random, let us consider general paresis, or softening of the brain. Where to place general paresis in our rectangle?

Were we drawing this graph 40 years ago, we, in our ignorance, may have placed general paresis entirely above the line, on the psychological side. No somatic causes then being known, psychological factors, along with heredity, were generally accepted as the etiology for the then dread, incurable disease. Doctors then described general paresis as 'mental.'

But this is 40 years later, and we have the benefit of Moore's and Noguchi's discoveries of the spirochete of syphilis in the cortex of the paretic brain. When that discovery was announced to the medical world, general paresis could no longer be labelled 'mental.' Ignorance had been wiped out by knowledge, theory had been replaced by fact; so today, we know that the components of general paresis are more or less 50 percent physical and 50 percent psychological.

In our rectangle of disease, general paresis must be placed in a segment that is 50 percent above the line, in the field of psyche, and 50 percent below the line, in the area of the physical.

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1949.

Next, let us take involuntional melancholia, that depression of middle life, with which you have dealt innumerable times in your practice. This is another illness that, 40 years ago, we may have placed, with conscience made clear by lack of knowledge, entirely on the psychological side. But since then, experience has shown us that involuntional melancholia is undoubtedly connected with an endocrine imbalance, the correction of which is too often an important feature in recovery to be ignored. I would not think of handling a case of involuntional melancholia without thoroughly investigating the patient's endocrine system, as well as her psychological condition.

Thus, on the basis of present-day knowledge, and in the firm belief that forth-coming investigations inevitably will provide us with even further proof of physical accompaniments, I would place involuntional melancholia partly below the line, on the physical side.

Now, where to place schizophrenia, the most prevalent, most chronic of all the so-called mental disorders? Where to place the manic-depressive psychoses? The reactive depressions? Anxiety hysterias? Neurasthenia? Hypochondriasis? On the psychological side, because no physical accompaniments have been established? No. The weight of evidence is so compelling that all of these disorders must also be partly below the line, on the physical side. I am firmly convinced that science will establish some physical components for these diseases also.

The 'mental' diseases are 'mental' only in the sense that we have not as yet been able to demonstrate their physical accompaniments or, stated another way, their physical recordings. Another factor contributing to our continuing ignorance in this sphere is that the so-called 'functional' diseases are often transitory and self-reversible.

A SOMATIC RECORDING OF THE EMOTIONS

During the past 15 years, certain laboratory efforts have been carried on in cell research which may be now well on the way to giving medicine an entirely new concept of the so-called mental diseases. It looks very much as if the physical accompaniments and physical recordings which have been lacking in many mental diseases are about to be supplied.

I am speaking of the investigations being carried on with the ultraviolet spectromicroscope, with which nerve cells are being magnified 20,000 times, making possible a measurement of particles within the cells

to an exactitude of one billionth of a micro-millimeter.

This technique has been used to investigate the function of the nerve cell, and it has been demonstrated that that function is associated with the cellular protein-rebuilding processes. These processes, in turn, have been shown to be vitally affected by physical and emotional stimulation and excitation.

For instance, there has been observed an alteration in the brain cells of animals as they are subjected to acoustic trauma; this is interpreted as a physiological response to an intense emotional excitation. There has also been demonstrated a change in the cells of persons who are physically exhausted, as compared with those who are rested. And similar alterations have been found in the pyramidal cells taken from the frontal lobes of persons suffering from various 'mental' diseases, including schizophrenia and manic-depressive psychosis.

After the emotional strain, during a period of rest, the cells were observed usually, but not always, to return to a normal state by means of an automatic replacement process, and the evidence seems conclusive that in those cases where the cells did *not* automatically reverse themselves to normal, we are dealing with a disease condition.

Surely the ability to examine a series of brain cells and say that this one is normal and that one is schizophrenic is a discovery of enormous promise. *We have every right to formulate the theory that emotional experiences can produce a definite change in the physical structure of the nerve cell, and be manifested outwardly in psychological symptoms.* We also have ample basis for the theory that sustained or intensive emotional stresses and strains, as well as physical stresses and strains, may push this alteration of protein metabolism in the nerve cell to the point where it is no longer self-reversible. This may be only a hope, but I am inclined to accept it as a highly credible hypothesis.

If such an hypothesis be true, a second one is justified. That is that psychological and/or chemical means may be found to reverse these cellular chemical changes that may otherwise have continued irreversible. For many years, of course, psychiatrists have been striving to understand and favorably influence psychological adjustment, and through this new measurement of man's reaction to emotional stresses and strains, we may hope for a more concise understanding.

Then, too, chemical substances have been identified that stimulate this cellular protein metabolism. Pioneers have already administered, to chronic mental patients, intravenous injections of malononitrile, followed by sodium thiosulphate, with temporary improvements in the psychic condition of the patients. Time only knows what this means, but I believe unquestionably that this work is leading to an intense search for chemotherapies for mental disease.

I believe also that following these new techniques for studying cellular protein metabolism, there is destined to be widespread efforts to adapt the biologics to the treatment of psychiatric patients.

Each of you within the sound of my voice has lived to see our former theories and practices in somatic medicine torn to pieces by present-day chemotherapy with its penicillin and sulfa drugs, and by present-day biologic therapy with its endocrines, serums, and so forth. Is it too much to hope that some of those within the sound of my voice will live to see a similar revolutionary use of chemotherapy and biologic therapy in the treatment of at least some of the mental diseases?

I am not a basic scientist, but with these present-day possibilities, I wish I were. As it is, I have only sufficient knowledge to appreciate the significance of these efforts, and to facilitate these investigations in my own institution.

Sixteen years ago, I predicted that with a better knowledge of cytochemistry and the soma would come the greatest advances in making psychiatry a scientific branch of medicine; but I must confess, I did not even hope that in my lifetime I would see demonstrated before my eyes the tangible evidence that the emotions can actually change the constituents of a brain cell. So it is that I say, the time may be at hand when we can see a mental disease! I hope that before the passing of another generation, we will stop talking about mental disease as though it were apart from other disease processes.

Even had I not been certain on a theoretical basis long ago, these latest cytochemical reports would convince me that in the rectangle of disease, we must place schizophrenia, manic-depressive psychosis, and neurasthenia, along with every other disease, partly below the line, on the physical side.

ALL DISEASES HAVE PSYCHOLOGICAL COMPONENTS

I am equally certain that all of the so-called physical diseases must be partly above

the line, on the psychological side. To my way of thinking, these new laboratory findings are not only revealing heretofore unknown physical accompaniments of certain mental illnesses, thus opening the way to new physical treatments, but these same laboratory findings are pointing out the importance of psychological factors as one of the causes of some physical diseases.

The indications are that disease, with a physical recording, can be caused exclusively by psychological trauma, a point of view that some of the more realistic men of medicine have had difficulty in accepting. I refer to psychosomatic medicine which, by the way, is nothing new. The term, psychosomatic medicine, was first used over a hundred years ago, and the fact that our emotions might cause physical upsets and diseases is as old as recorded history. As a matter of fact, many of the vulgar expressions of today pay tribute to this fact, as witness such expressions as 'my heart's in my mouth'; 'he has no intestinal fortitude,' and so forth. These same vulgar expressions carry back into antiquity.

Also before the advent of modern medicine, man and his emotions received an enormous amount of attention. The 'art of practice', which used to be talked about so much, was essentially dealing with the psychological side of disease; it was dealing with man and his emotions. Then along came the microscope and bacteria and the scientific attack on disease. Man and his emotions were pushed to one side, forced to yield to the interest in disease itself, and medicine forgot that the whole man, including his emotions, is the vehicle and the victim of bacterial and all other forms of sickness.

Let us deal more in detail with the physical diseases and their psychological accompaniments, and return to our rectangle of disease. We certainly know that a person suffering from a physical disease also undergoes some change in his psychic life. It may be a profound change, as in the delirium of typhoid fever, or it may be relatively minor, as in the patient with a carbuncle.

If you are of the opinion that there is no psychological accompaniment to a carbuncle, I commend you to a personal experiment along the lines of acquiring a carbuncle to see if your psyche does not undergo a change noticeable to you and to your family, although it may be transitory. Therefore, even the lowly carbuncle in our rectangle of disease must have some part of

its segment above the line, on the psychological side.

We also know that psychological stresses and strains can cause physical disturbances. We have all seen any number of backaches, headaches, gastric upsets and even gastric ulcers, and so on, that never would have been obtained had there not been contributing emotional factors.

There is the matter of hypertension. I believe firmly that if there is the slightest tendency toward hypertension, it can be aggravated by misguided emotional involvement, with concentration on unpleasant possibilities.

Consider the coronary patient who is told by his doctor that he is in imminent danger, he must go straight to bed, do little or nothing for a time, and then resume activities gradually, very gradually, and he may — not will, but may — live five years. Rest in bed and momentary relief may be indispensable, but the mode of prescription may also spell the difference between helping the patient or making a bad matter worse.

Such a warning, or a threat, whichever we might call it, was once issued to a friend and colleague of mine. He was left alarmed and tense, with a morbid fear of over-exerting. All his movements became over-cautious. An anxious expression was his constant companion; and above all, his hypertension was increasing to the danger point.

Finally I said to him, 'Relax, old man. You might as well be dead as practice at it. You're not going out to play baseball. You're not going to over-exert yourself, but by all that's right and holy, the rest of your life belongs to you.'

Well, he lived for 14 years after his attack, during which time he took things more easily than before, but I am sure he lived longer because he realized, before it was too late, that all he was being asked to do was to 'be his age,' and to lead a reasonably quiet life.

Another case I remember was a woman patient inclined toward hypertension who would occasionally come to us for a check-up. During her visits, there was a fluctuation of 60 millimeters in her blood pressure, without the use of drugs or anything else except helping and teaching her to adjust emotionally to her problems, which in her case were largely centered around her husband.

Then, too, there are all the gynecological disorders, with their profound emotional in-

volvements. I am reminded of one patient who ended up in my office. She had been suffering from cancer and had been going to a gynecologist who subscribed to the straight-from-the-shoulder technique. One day during a visit, he had told her quite bluntly that she had cancer of the uterus and that there was general metastasis. Further, he intoned that she would probably live no more than from three to six months longer. Then, being a busy man, he marched off, leaving the patient bewildered and distraught, wandering about her home. There her husband returned — in time to prevent a tragedy.

Also, I have had any number of women patients following hysterectomies. Their personalities had been sharply and disturbingly changed, not by the removal of the ovaries and the uterus, but by the removal of a part of their ego that is indispensable to the emotional integrity. Furthermore, I have seen their physical complaints disappear with no treatment other than repairing the emotional damage that had been done. The tragic part is that probably in the majority of cases, the proper manipulation of their emotional involvement in the first place would have avoided the emotional damage altogether.

Hyperthyroidism, as another example, has been commonly accepted as calling for operative procedure, but we have now learned, beyond any shadow of a doubt, that limiting treatment to surgery alone is the major reason for unsatisfactory results, when such disappointments occur. It is evident that anyone sick enough to need surgery also needs his emotional balance inquired into to assure good results. Furthermore, in some cases, after helping the patient regain a good emotional balance, physicians have often found surgery to be unnecessary. This is no pearl of wisdom discovered by me. It is a statement of fact which now comes from the 'mouths' of the best surgical 'hands' in thyroidectomy!

If we had time, I could cite innumerable instances where there is new respect for the emotions in the profound etiology of disease, but suffice to say that it is more and more evident that in the rectangle of disease, all physical diseases must be partly above the line, in the field of the **psyche**, even as all mental diseases must be partly below the line, in the field of the physical. Medical men are becoming more and more appreciative of the interrelationship between the mind and body in health and in disease.

THE PSYCHIATRIC PROBLEM IS THE PROBLEM OF MEDICINE AS A WHOLE

It is my sincere hope that this new appreciation for the interrelationship between the psychological and the physical in disease will have the effect of welding psychiatric and medical efforts more closely together.

I cannot miss the opportunity of calling to your attention the fact that the specialty of psychiatry has been very largely the function of the state and other public hospital systems for the past hundreds of years. The medical profession generally closed its eyes to the growing public health problem of mental disease. Possibly because of the hopelessness attendant on yesteryears, doctors washed their hands of any responsibility for their own patients if those patients developed into psychiatric problems. Without a pang of conscience, most doctors had nothing to do with mental disease; it was out of their line. Psychiatric patients were put away, literally, as well as figuratively, speaking.

The old family practitioner did better than that. He had to, for he lived before there were many asylums or mental hospitals where psychiatric patients could be sent. In those days, the family practitioner took an interest in psychiatric cases and often he did a pretty good job, mainly because the patient remained in the normal surroundings of the home and the community.

However, as far as the psychiatric problem is concerned, American medicine has

nothing to be proud of for the last 150 years. It took two world wars to impress upon the public and the profession at large the necessity for doing something aggressive and constructive about mental illness.

Today there is a branch of medicine devoted to mental illness. It is suffering a few growing pains with many diverse schools of thought and many theories yet to be evaluated and proven, but at least the medical profession as a whole is now acutely aware of the problem represented by the specialty called psychiatry. I personally prefer the term, psychological medicine, because by using such a term, we permanently affix the responsibility for solving the problem upon the medical profession as a whole and, at the same time, we disidentify ourselves from any weird or questionable practices.

The prevention and cure of mental disease is your responsibility as men of medicine. The answer to the problem of mental disease will not come from psychiatry as an isolated specialty insulated from the rest of medicine and science; the answer will come — it is coming — from the interest and hard work in the pure science laboratories and the clinical strivings in every branch of medicine, including psychiatry.

In the past 50 years, we have come a long way in our understanding of disease, but I am convinced that even now we stand on the threshold of unprecedented discoveries. The greatest advances of medicine lie ahead of us.

MEET OUR CONTRIBUTORS

M. A. Johnson, M.D., Tulsa, wrote "Trends in the Treatment of Cancer of the Bladder" in this issue of the Journal. Dr. Johnson attended the University of Chicago School of Medicine and was a member of the Wisconsin State Medical Society before coming to Oklahoma. He served his internship at Indiana University Medical Center, Indianapolis, and was in the U. S. Navy in 1945-46. Dr. Johnson limits his practice to his specialty, urology.

John Powers Wolff, M.D. and *Hal A. Burnett, M.D.*, both of Oklahoma City, are co-authors of the paper, "Sympathectomy for Complications of a Congenital Port-Wine Nevus." Dr. Wolff was graduated from the University of Oklahoma in 1927 and his specialty is surgery. Dr. Wolff and Dr. Burnett both served in the army. Dr. Burnett, who is on the staff of the University of Oklahoma School of Medicine, was graduated from the school in 1943.

Richard Clay, M.D., Oklahoma City, has a paper on "Strabismus in Children" in this issue. Dr. Clay was graduated from the University of Oklahoma School of Medicine and served his internship and residencies at the University Hospitals. He also was assistant resident (ophthalmology) at the New York Hospital, New York

City and assistant in surgery (ophthalmology) at Cornell University Medical College, New York.

C. Charles Burlingame, M.D., Hartford, Conn., one of the guest speakers at the annual meeting, has a paper entitled "The Emotions Under a Microscope" in the November Journal. Dr. Burlingame is president and psychiatrist-in-chief, Institute of Living, Hartford. He was formerly professor of psychiatry, Yale University School of Medicine. Dr. Burlingame is a diplomate of the American Board of Psychiatry and Neurology and a member of the American Psychiatric Association, Association for the Study of Internal Secretions, chairman of the sub-committee on psychiatry, Industrial Medicine Council of the National Association of Manufacturers.

John Albert Key, M.D., St. Louis, Missouri, another annual meeting guest speaker, wrote "The Treatment of Fractures of the Distal Third of the Femur" in this issue. Dr. Key is professor of orthopedic surgery, Washington University School of Medicine, St. Louis, and is a diplomate of the American Board of Orthopedic Surgery, visiting orthopedic surgeon, Barnes General Hospital, St. Louis, and a member of several orthopedic and surgical societies.

Trends In The Treatment Of Cancer Of The Bladder*

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During the past five to 10 years a number of changes in the treatment of cancer of the bladder have taken place. This has come about through alterations in our thinking in relationship to this disease. Modern surgical thought is turning toward the concept that complete excision of cancer, wherever possible, gives the most favorable results. In line with this, it can be observed that more radical procedures are being used with increasing frequency in the treatment of bladder neoplasms. In order to evaluate this change a study of two groups of patients treated at the University of Chicago Clinics under the direction of Dr. Charles Huggins was made. One group of 50 patients was treated between 1941 and 1944 and the second group of 50 patients was treated between 1944 and 1947. In order to better understand our current thinking it may be of value to briefly review our knowledge of bladder cancer together with some of the things brought out by this study.

For some as yet unknown reason cancer of the bladder is predominantly a disease of males; occurring about three times more commonly in men than in women. Following the discovery that aniline dye workers commonly suffered from bladder tumors, much investigation on the chemistry of the production of bladder tumors was undertaken. It is known that naphthylamine when injected into rabbits will produce vesical tumors. Further, carcinogenic substances have been found in human urine. But we still cannot correlate these observations with any factor or factors at work in our patients. Of 100 patients in our study, 66 occupations were represented, none of them related to the dye industry. As to age, the highest incidence was found to be between 55 and 65 years, with extremes of 35 and 80 years of age. Both men and women have an equal involvement with respect to age.

The vast majority of these cancers are of epithelial origin and are primary in the

bladder. Metastatic growths in the bladder are seldom seen although secondarily the bladder may be involved by the extension of cancer of the bowel or uterus. Leukemic infiltrations, endometriosis, sarcoma and leiomyoma are rare. However, papillary carcinomas of the renal pelvis are not uncommon and may implant in the ureter and bladder and as such may simulate primary lesions. Hence, care in the study of bladder papillomas is important to avoid a mistaken diagnosis.

As to symptoms, blood in the urine is the most significant. The importance of this symptom cannot be overemphasized. We are still seeing too many patients who have procrastinated after having first seen blood in the urine or who have had this symptom minimized while they were treated palliatively. Hematuria was the initial symptom in 76 per cent of all cases and 94 per cent observed blood in the urine at some time in the course of their disease. Further, all six patients who had not observed gross blood were found to have microscopic blood in the urine. Frequency, urgency and pain on urination occurred in about one-half the patients, while about one-third had noted weight loss. These symptoms had no direct relationship to the stage of the disease.

Briefly, diagnosis is accomplished only by cystoscopy. The patient's history, urinalysis or x-rays may be suggestive of bladder tumor, but it is only by cystoscopy that we may accurately determine the location, size, relationship to the ureters, papillarity or solidness, or the width of the pedicle. However, degree of invasion and metastasis may yet remain in doubt after cystoscopic study. It is true that neoplastic cells may be found in the urine and the staining technique of Papanicolaou and Marshall may at times be helpful. Further, pieces of tissue either washed out of the bladder or obtained by biopsy may be studied. Bimanual examination with the patient under anesthesia, as advocated by Jewett, may give information

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regarding operability of a lesion. X-ray studies are particularly an aid where carcinoma of the renal pelvis is suspected or when a solid tumor of the bladder which may produce ureteral occlusion or dilatation is found. Since ureteral changes are often silent and because they profoundly influence the treatment, they must not be overlooked. In 13 cases silent unilateral obstruction by tumor was found. Metastasis is by way of the periaortic lymph nodes and may be early or late. As yet we have no test for metastasis comparable to the serum phosphatase test for prostatic cancer.

From the clinical point of view two great classes of tumors exist and treatment is largely based on this fact. Some 80 percent have a papillary component while the remainder are solid. The size of the pedicle is of prognostic significance; a papillary tumor with a slender pedicle is usually cured with ease whereas a lesion associated with a wide base is often accompanied by infiltration. Solid tumors are sessile and often ulcerated; there may be metaplasia to the squamous type of cancer. The most malignant tumors are undifferentiated as regards cell type. The lower part of the bladder wall including the trigone is the most apt to become the seat of tumor and two-thirds to three-fourths of all bladder tumors will be found in the posterior inferior quadrant. It is in these positions that ureteral obstruction with associated hydronephrosis and renal insufficiency may be produced. Hence, in any plan of treatment, the location of the tumor must be considered. Further, the location of the tumor has great bearing on the feasibility of any projected surgical attack.

Only two basic methods of treatment are available; surgery and radiation. No effective medical treatment has yet been proposed. Prior to about 10 years ago irradiation was extensively used. In this method the bladder is usually opened suprapubically and radon or radium seeds implanted at the tumor site. X-ray therapy may or may not be used in conjunction with the seeds. This method is fairly easy of application and in skillful hands has favorably affected survival rates. It may be used on patients who refuse more radical surgery. However, a definite trend away from radiation has been manifested more recently. Many bladder tumors are insensitive to any but huge amounts of radiant energy. Patients who have had seeds implanted are usually the victims of many months of painful cystitis

even if they escape such complications as fistulas to the skin, vagina or rectum, or upper urinary tract infection and obstruction.

It seems that as surgical methods improve, radiation is being used less and less.

The surgical methods of attack may be divided into (1) endoscopic fulguration, (2) suprapubic fulguration, (3) suprapubic partial cystectomy and (4) total cystectomy combined with some means of diversion of the urinary stream. The size, number, location and papillomatous character of the lesions are all factors in the selection of treatment. While one does not perform total cystectomy for a tiny papilloma, or fulgurate a large ulcerating lesion, it is difficult to outline any standard schedule of treatment. This is because degree of malignancy and presence or absence of metastasis cannot always be determined.

Papillary tumors which are small in size and few in number may be treated by simple fulguration with the Bugbee electrode. This is a simple procedure which can be carried out on ambulatory patients. It may be used in treating tiny recurrences following a more radical procedure. The Stern-McCarthy resectoscope may be used transurethrally on large papillary tumors with narrow bases. Hospitalization and adequate anesthesia is required. Dissection and fulguration may be carried down to and into the muscular layer of the bladder and, if properly done, may yield a cure in suitable cases. Papillary tumors with a broad base or in an inaccessible position are treated by suprapubic exploration. Careful study is made for infiltration and metastasis. The peritoneum may be opened to examine for metastasis. Provided the tumor can be removed with a wide cuff of normal bladder tissue, a segmental resection is performed. It may be necessary to transplant an involved ureter. This operation is being performed with increased frequency. In the earlier group of cases it was used in 12 per cent, while in the recent group it was used in 18 per cent of the cases.

Suprapubic fulguration is used where segmental resection cannot be performed. However, there is a tendency to discard this operation in favor of total cystectomy. In massive involvement of the bladder by small papillomas, or if a solid tumor is present, total cystectomy is the treatment of choice. There is a distinct tendency toward the more frequent performance of total cystectomy. In the later group of cases total cystectomy was the operation carried out in

34 per cent of cases as compared with 12 per cent of the earlier series.

Deviation of the urine preliminary to total cystectomy may be accomplished either by cutaneous ureterostomy or by ureterosigmoidostomy. Obesity, infection, or high-grade ureteral dilatation may render ureterosigmoidostomy impractical; in these cases cutaneous ureterostomy is performed. This operation is easily accomplished and with little shock to the patient. However, the problem of collection of the urine makes this a less desirable operation. The patient is always burdened with some collecting apparatus even if infection and stricturing of the stoma can be avoided. Since bilateral cutaneous ureterostomy more than doubles the care required, Huggins and Scott have suggested cutaneous ureterostomy with contralateral ligation of the ureter. In these cases the cystectomy operation is not performed ordinarily. Diversion of the urine may add months to the patient's life by removing the danger of hydronephrosis and uremia; further, the painful bladder spasms and urgency are often relieved markedly by simple deviation of the urine.

More recently attempts have been made, particularly by Heckel and Abeshouse, to eliminate indwelling ureteral catheters and to facilitate the collection of urine by the use of a skin tube of some sort around the end of the ureter so that it projects beyond the level of the skin. Cutaneous ureterostomy has been reported to be so success-

ful that subsequent ureterosigmoidostomy was possible.

Ureteral transplantation to the colon is being done with increasing frequency. There is as yet no standardization as to technique for this operation. However, any technique which does not conform to certain physiological principles is doomed to failure. Leakage, infection and ureteral stricture must be avoided. Careful preoperative preparation to reduce the bacterial flora and to empty the colon is required. The anastomosis must be so located as to reduce the danger of leakage and peritonitis. The ureter must take a direct course to the bowel, without kinks. The intrinsic blood supply of the ureter must be preserved. This is of great significance and attention to this factor may be more important than any attempts at tunneling of the ureter into the bowel. At present, surgical techniques have been improved to the point where many surgeons are now doing the bilateral sigmoidostomy operation and total cystectomy in one stage.

In palliation, permanent suprapubic cystostomy has been discontinued, being replaced in hopeless cases by an internal or external ureteral shunt.

SUMMARY

Operative procedures in the treatment of cancer of the bladder are gradually replacing irradiation therapy. These procedures are in line with modern surgical thought wherein malignant lesions are widely excised.

STRABISMUS IN CHILDREN*

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Every medical practitioner, no matter how removed from ophthalmology or how limited his field may be, is occasionally faced with the problem of what to do with the child who has strabismus. As a general surgeon, an internist, a pediatrician or a family physician his part may be no more active than to advise the parents of the time and methods of securing proper care and to place them in capable hands; yet it is most important that the doctor possess some understanding of the various malfunctions of the oculorotary muscles. Only the

doctor, not the parents, can understand the importance of early diagnosis and active treatment and he must accept the responsibility of seeing that the child is not neglected.

ETIOLOGY

The question of the etiology of strabismus, more often called "squint", has been explored for many decades with no explanation seeming adequate for all cases. In general it may be said that any obstruction to proper fusion of stimuli from the two eyes may cause a squint. Fusion, or single binocular vision, is the faculty which stimu-

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lates the eyes to maintain parallelism and is, therefore, the prophylaxis or the cure for many deviations. Fusion was once thought to be an inborn function of the higher cerebral centers having a sharply defined area in the brain just as that associated with speech. This is now generally accepted as untrue and single binocular vision may be said to be developmental — a conditioned reflex. It is a reversible process; one which may be broken up, lost and regained. Chavasse outlined this idea of fusion as an acquired ability most simply when he stated that learning to use the eyes together in single binocular vision is just like learning to use the two legs together in walking. We must learn to walk and we must also learn to see. A child may learn to walk with legs of unequal length, but it will not be an easy, graceful walk like that of a normal child. Likewise, if there is an obstruction to single binocular vision the child may learn to see, but not with the ease and gratification of those who properly fuse the two stimuli.

It must be clearly understood, then, that all squints are binocular in the sense that one eye fixes and the other deviates. If good vision exists in each eye, the child may have the ability to fix with either one but, since he has an obstruction to fusion, the opposite eye will deviate.

The obstacles to fusion are usually classed as sensory, motor and central. Sensory obstacles are characterized by interference with formation of the image on the retina, or its perception. They may be opacities in the media, such as congenital cataracts, corneal scars or vitreous floaters; or anatomical and developmental defects of the retina and optic nerve. Retinal hemorrhages incident to birth trauma are apparently much more frequent than was once realized, and therefore a likely cause for sensory obstruction to fusion. Hemorrhages of some degree in the retina are said to occur in from 40 to 60 percent of all births.

By far the most common sensory obstruction encountered, of course, is an error of refraction, especially marked differences in refraction between the two eyes. Donders was first to suggest that the badly farsighted, or hyperopic, patient would attempt to compensate for his error by strong accommodation and in so doing would overconverge. He pointed out also the weak convergence associated with myopic errors of refraction and the frequent association of divergent squint with nearsightedness.

Motor obstacles to single binocular vision may also follow birth trauma and may range in severity from paralysis of one muscle to avulsion of all the recti muscles from their origin. Transient inflammatory changes or fibrosis of an ocular muscle, faulty insertions of muscles, or even non-development of one or more muscles may occur as motor obstacles to fusion.

Central nervous system pathology may present an obstruction to ocular coordination, usually on the motor arm of the fusion reflex. A nerve trunk may be involved in meningitis, whether it be tuberculous, syphilitic, epidemic or infective. Aside from the nerve trunk, the nucleus itself may be involved and paralysis from this cause is seen in botulism, lead and alcohol poisoning, and the intoxications of measles, diphtheria, influenza and associated diseases.

Certain factors must be noted in studying muscular imbalances in order to clearly understand them. First it must be determined if the deviation is constant or intermittent since some children exhibit a squint only when cross or fatigued while others never have parallelism of the visual axes at anytime. The intermittent type usually falls in a class known as "phorias", or tendencies to squint, while the constant ones are called "tropias", or manifest deviations. They may be further designated according to the direction of deviation by the prefixes "eso" for a turning inward — for example, esotropia; "exo" for a turning outward — for example, exotropia; or "hyper" for a vertical deviation — for example, hypertropia, right or left, according to which is the higher eye.

Secondly, the deviation must be identified as monocular or alternating. A monocular squint is one in which the fixing eye is always the same and the other eye always rotated, usually with resulting poor vision in the latter eye. An alternating squint, on the contrary, is characterized by the shifting of fixation from one eye to the other, usually with the conserving of good vision in both eyes.

TYPES OF STRABISMUS

1. Paralytic squint
2. Non-paralytic (concomitant) squint
 - A. Accommodative
 - B. Non-accomodative

All squints are either paralytic or non-paralytic. Paralytic squint is due to a loss of function of one or more of the ocular muscles and this may be complete or partial. The deviation becomes very marked or ex-

aggrated in the field of action of the paralyzed muscle but it diminishes or even disappears in other directions of gaze. When the right lateral rectus is paralyzed and the patient is at ease with eyes front, the right eye will turn in — this is called the “primary deviation.” If, on the other hand, the sound eye is covered and he is asked to fix with the affected eye, a maximum effort will be exerted by the paralyzed muscle to hold the eye straight and, since Hering’s Law states that each eye receives an equal stimulus, the sound eye will be overstimulated and will have a marked deviation inward — this is the “secondary deviation.” One of the cardinal points of differentiating a paralytic from a non-paralytic squint is that its secondary deviation is always greater than the primary one. Also of importance is the fact that the visual axes can no longer be kept parallel and the patient experiences diplopia which becomes more marked as the eyes move into the field of the paralyzed muscle.

Non-paralytic, or concomitant, deviations result from anomalies of the power of convergence and divergence. Since we can converge or diverge as well in one direction of gaze as we can in another, these squints tend to remain the same in amount and character at all times and in all fields of rotation. The power of the different muscles of the two eyes is usually normal so that there is a normal range of movement and secondary deviation usually equals primary. Diplopia, a prominent symptom in paralytic squint, is not present in the concomitant type.

A certain group of these non-paralytic deviations are called “Accommodative Squints” because the disturbance in the delicate balance between convergence and accommodation is due to errors of refraction. Thus the natural efforts of the eyes to overcome their refractive error may cause a strong accommodation with a corresponding excess of convergence, or the weak accommodation called for in myopic eyes may be accompanied by a lag in convergence. Originating as they do from errors of refraction, over 90 percent of these accommodative squints are corrected so long as glasses are worn. The vision is generally not as impaired as in the non-accommodative type and surgery usually makes the condition much worse rather than improving it.

On the other hand, the non-accommodative squint is seldom relieved by glasses and over

75 percent must have surgery. This type has its highest incidence in hyperopia of moderate degree and extremely high or extremely low hyperopia is rare. Anisometropia, a marked difference in the refraction of the two eyes, is common. It is also this type in which convergent squint is occasionally seen in a myopic individual. The fusion faculty is very poor as a rule and attempts to improve it by training or by patching the better eye may make the strabismus worse instead of better. Strangely enough, however, the fusion amplitude often improves very strikingly after surgery.

“Amblyopia ex anopsia” is a condition which develops in the non-accommodative squint due to great differences in refraction between the two eyes. If one eye is badly hyperopic and the other is not, the size of the two images presented to the brain is so different that they cannot be fused. The child unconsciously suppresses or ignores the image in the hyperopic eye and ceases to use that eye. As a result, vision does not develop, the eye is said to be amblyopic, and usually it turns in or out.

Most cases of non-paralytic horizontal squint tend to fall into one of four classifications according to their behavior:

1. Convergence insufficiency — A weakness of inward rotation for near vision manifest as an exotropia for close work with parallelism for distance.
2. Convergence excess — An over convergence for near vision with resulting esotropia for near while no imbalance exists for distance.
3. Divergence insufficiency — The eyes cannot be fully diverged to parallelism and an esotropia is present for distance.
4. Divergence excess — Exotropia is present for distance due to over divergence.

After a short time, mixtures of two of these conditions develop so that a patient may not only have a divergence insufficiency but a secondary convergence excess, the eyes crossing for both near and far.

DIAGNOSIS

The accurate diagnosis of the type and severity of squint present is outside the realm of this paper. The average practitioner can, however, determine that some imbalance is present and get a general idea of its nature. The patient is most often presented to the doctor because of disfigurement, so that inspection of the apparent relations of the eyes in the primary position is often very helpful. In slight cases, how-

ever, this cannot be relied upon and three simple tests will further aid in observation of the case:

1. **Observance of Motility** — In this test a small object such as a pin or a fine light is held at about 15 inches from the patient and he is asked to watch it steadily. The object is then moved into the extreme of gaze laterally as well as up to right, up to left, down right and down left. Any very obvious squint, such as that due to paralysis of one or more muscles, can be made out at once by this means alone.
2. **Cover Test** — This may be done with the patient looking at a distance or at reading position. As the patient fixes on some object, a small card is passed from one eye to the other so that the eyes are alternately covered and he is forced to shift fixation from one eye to the other. Each eye when covered deviates, and when uncovered turns back into fixing position.
3. **Corneal Reflection Test** — This gives the angular measurement of the squint in degrees of an arc. The patient looks at a small electric light held about one foot in front of the eyes. The examiner, seated just behind the light, notes the position of its reflection on the cornea of each eye. The reflection in one eye will be centered squarely over the pupil. If the other reflection is at the margin of the cornea it represents a squint of 6 mm. or 45 degrees of an arc. Every

mm. of deviation represents seven degrees of an arc.

TREATMENT OF DEVIATION

After the proper diagnosis is established, treatment will proceed along four lines:

1. Correction of refractive errors by glasses.
2. Occlusion of the better eye to prevent or reduce amblyopia by stimulating the poorer eye to fix.
3. Orthoptic training to develop the fusion sense.
4. Surgical correction of the remaining deviation.

The refraction should always be done under full cycloplegia in the case of a squint and in the accommodative type the full correction will be prescribed. It must be stressed that glasses which do not improve the squint in about three months will probably never be of value. It is useless to have the child wear glasses for years in the foolish hope that some day they may alleviate the defect.

CONCLUSION

A general idea of the etiology, classification, diagnosis and treatment of strabismus in children has been presented without attempting a deep, comprehensive discussion.

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SYMPATHECTOMY FOR COMPLICATIONS OF A CONGENITAL PORT-WINE NEVUS*

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AND

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The case to be presented is a 29-year-old white woman with a congenital port-wine nevus involving the entire left leg. An indolent ulcer and persistent pain in this extremity were successfully treated with lumbar sympathectomy. Although lumbar sympathectomy has been employed with good results in a variety of pathologic conditions, a similar case is not reported in the literature.

REPORT OF A CASE

A 29-year-old white woman was admitted to the University of Oklahoma Hospitals on

January 28, 1948, complaining of a painful left leg. A congenital port-wine nevus involved the extremity and a recrudescing ulcer was present at the ankle. The ulcer first appeared 12 years ago and on each recurrence, has responded to moist heat, rest and elevation for short periods. Elastic pressure dressings were of no benefit.

On examination the left lower extremity was smaller in circumference but 2.5 cm longer than the right. A diffuse coalescent port-wine nevus involved the entire leg and extended up to the superior iliac spine. With

the leg dependent, the nevus displayed a purple color and no pulsations could be elicited over it. The left foot was swollen cool and moist. Adjacent and proximal to the lateral malleolus, an ulcer three by four cm. was present. The defect had a punched-out appearance and the edges were inflamed. It was surrounded by dense scar tissue.

Normal pulsations were noted in the femoral, popliteal and dorsalis pedis arteries. No murmurs or bruits were heard on auscultation of the leg. No thrills were elicited by palpation. There were no demonstrable varicosities. Roentgenograms of the leg revealed no abnormalities.

On admission, injections of one per cent novocaine in the left lumbar sympathetic chain produced a warming of the leg and relief of the pain. Five days after admission

the left sympathetic ganglia at the level of the second, third, fourth, and fifth lumbar vertebrae were removed. An immediate response was obtained. The patient's postoperative course was uneventful and she was discharged from the hospital on the sixth postoperative day, wearing an elastic bandage.

Two weeks following surgery, the ulcer had healed but a mild edema of the ankle persisted. One year later, the leg was painless, warm and dry and the ulcer had completely healed. The patient had gained weight and was asymptomatic. She stated that no edema had recurred.

COMMENT

Reflex dystrophy and causalgia are generally recognized as indications for sympathetic surgery. Favorable results with sym-



Fig. 1

*Port-wine nevus of
leg and healed ulcer
at ankle.*

pathectomy for trophic ulcers have been reported by many authors.^{1 2} The effects are ascribed to the relief of vasospasm and a subsequent increase in the collateral circulation.

A congenital port-wine nevus, nevus flammeus, of the lower extremity is commonly associated with varicose veins, deep seated cavernous hemangiomas or multiple arterio-venous fistulas, some of which traverse the bony structures.³ When fistulas are present, the shunting of blood may deprive the extremity of nutrition, resulting in vasospasm, edema and ulceration. Concomitant varicosities may produce the same

findings and may be easily overlooked. In our case, the results of sympathectomy compensated adequately for the apparent circulatory deficiency.

SUMMARY

A lumbar sympathectomy, producing relief of pain and complete healing of a long-standing trophic ulcer in an extremity with a congenital port-wine nevus is reported.

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THE TREATMENT OF FRACTURES OF THE DISTAL THIRD OF THE FEMUR*

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These serious injuries are not infrequent and may result from highway accidents, falls from a height or some form of direct violence. With the exception of the rare fractures of a single condyle, there is always a complete break across the lower portion of the shaft of the femur and the diagnosis is obvious. The lesion may consist of a simple linear fracture or the bone may be comminuted to a variable degree. In some instances, the fracture line is transverse or slightly oblique and crosses the diaphysis just above the condyles (true supra-condylar fracture of the femur). More often, however, it is oblique, coursing upward and backward and thus, the distal end of the proximal fragment is pointed and tends to slip down into the knee joint and lie between the patella and the condyles of the femur.

In a considerable proportion of the cases, the condyles are separated by a more or less vertical fracture through the distal fragment (T or Y fractures of the lower end of the femur) and there may be extensive comminution involving the entire distal portion of the femur. Due to the fact that the distal third of the femur is covered by a relatively thin layer of soft tissue, these fractures are more likely to be compound

than are fractures involving the proximal two-thirds of this bone.

The displacement of the fragments is influenced by the following factors: the fracturing force, gravity, muscle pull, and the contour of the main fragments. The fracturing force may angulate the bone or displace either fragment in almost any direction in relation to the surrounding tissues. Gravity tends especially to displace the distal fragment as the leg and foot are prone to roll outward unless they are supported.

The influence of the muscles on the proximal fragment is not very important, as here the various muscle groups are fairly well balanced, but the position of the distal fragment may be strongly influenced by muscle pull. This is because the principal muscles which are attached to the distal fragment are the adductor magnus which inserts into the adductor tubercle and the two heads of the gastrocnemius which arise from the posterior surface of the shaft, just above the condyles. The adductor magnus tends to pull the distal fragment inward and the gastrocnemius tends to tilt its proximal end backward into the popliteal space where the sharp fractured edge of the posterior cortex may injure the vessels and nerves. All of the muscles which cross the knee joint tend to pull the distal fragment towards the

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body and cause shortening, angulation and overriding of the fragments. The contour of the fragments may be such that they may be interlocked and thus, prevent displacements which would occur if the fragments were freely movable.

The early complications are other injuries, shock, hemorrhage and paralysis of the tibial and peroneal nerves, and in compound fractures, infection of the wound may occur. Late complications are delayed or non-union, mal-union, traumatic arthritis of the knee and limitation of flexion and loss of power in extension of the knee due to adhesions of the quadriceps femoris to the shaft of the femur.

The treatment of these fractures is difficult and in many instances, the end results leave much to be desired. The patient with a fresh fracture through the distal third of the femur should be moved as little as possible until the fracture is splinted, either in a Thomas leg splint or a long board (Liston) splint. After the fragments have been immobilized, he should be transported in an ambulance to a hospital where he can receive expert treatment.

At the hospital, he should be considered an acute surgical emergency and active treatment should be instituted as soon as possible after admission. The first consideration is the patient's general condition. If shock is present, this should be combated and plasma or preferably whole blood should be administered. If the fracture is compound and he is bleeding, this should be stopped. If a tourniquet is on the leg, it should be removed as soon after admission as possible and other means used to control the bleeding if necessary. In compound fractures, penicillin (50,000 units intramuscularly) and tetanus antitoxin (1,500 units) should be given as soon after admission as possible.

The patient should be examined for other injuries and for complications of the fracture of the femur (nerve and vascular injuries). He should then be sent to the x-ray laboratory or a portable machine should be used and roentgenograms in two planes should be obtained. From the information obtained from the examination of the patient and the roentgenograms, a plan of treatment should be decided upon.

Each experienced surgeon has his own methods of treating certain injuries and he should use that method which has proven to be most satisfactory in his hands. Some surgeons manipulate the fracture and immobilize the extremity in a plaster cast,

some treat it by skeletal traction and others operate upon it immediately and use some form of internal fixation to immobilize the fragments. We support the extremity in a Thomas splint with a hinged knee piece (Pearson attachment) to support the leg, or a Braun type splint and apply skeletal traction to the tibia (Fig. 1). If this does not satisfactorily reduce the fracture and maintain reduction, we may place a traction wire through the distal fragment or perform an open reduction in the splint and internally fix the fragments if this is indicated. Our procedure is as follows:

The patient is given 16 to 1 1/4 grain of morphine and 1 1/2 to three grains of nembutol. Then 20 c.c. of one per cent solution of novocaine are injected into the hematoma of the fracture. The patient is moved to a bed equipped with an overhead frame, a trapeze, a fracture board (preferably hinged) and a firm mattress. The ring of the Thomas splint is slipped over the extremity and pushed well up against the tuberosity of the ischium. The slings of the splint and of the leg piece are then adjusted and the extremity is pulled down in the splint and the foot is fastened to the foot piece and the splint is elevated to an angle of about 45 degrees and suspended from the overhead frame.

The skin of the proximal 1/3 of the leg on either side is painted with a skin antiseptic and a small area including a wheal in the skin and the tissues down to the bone is infiltrated with one percent novocaine. A Kirschner wire is then pushed through the skin and drilled through the shaft of the tibia just distal to the tubercle. Care is taken that the wire passes through the bone as near transversely as possible, otherwise it will slip laterally when traction is applied to the bow. A sterile sponge is slip-



Fig. 1

ped over each end of the wire and fastened to the leg with adhesive or a bandage. The wire is then tautened with a traction bow and a rope is fastened to the bow and passed down through a pulley at the foot of the bed and 25 pounds or more of weight is suspended from the rope and the foot of the bed is elevated six or eight inches.

The Pearson hinged leg attachment is then slipped up so that the angle of greatest pressure lies just beneath the fracture and is suspended from the end of the splint. The slings are readjusted to distribute the pressure comfortably and to maintain the normal anterior convexity of the thigh. A rope is fastened to the ring of the splint and passed up through pulleys on the frame and over the head of the bed and five pounds of weight is suspended from this rope. This tends to hold the ring up against the ischium, or the rope may pass down and suspend the splint and the leg piece with a counterweight in the middle as in Fig. 1. Finally, the fragments are manipulated manually in an effort to effect a satisfactory reduction and the thigh is bound in the splint with an elastic bandage.

Two or three days later, x-rays are made in two planes and if the position of the fragments is satisfactory, the weight is reduced to 10 or 15 pounds and a treatment by traction is continued until the fracture has united; or from four to six weeks, until union is sufficiently advanced to permit transfer to a fracture table and application of a plaster cast without undue danger of losing the satisfactory position of the fragments.

If the position of the fragments is not satisfactory, it is advisable that something be done as soon as convenient to remedy the fault. The causes of unsatisfactory reduction

are: 1., persistent shortening or lengthening with overriding or distraction of the fragments, 2., tilting backward of the distal fragments, 3., serious malposition of one or more large fragments in comminuted fractures, 4., malposition of one or both condyles in fractures involving the condyles.

The shortening or distraction may be corrected by increasing or decreasing the traction. The tilting backwards of the distal fragment may be corrected by passing a Kirschner wire through this as near to the broken end as possible (under x-ray control) and then applying sufficient vertical traction to this fragment to pull it back into position and hold it parallel with the proximal fragment. If the above measures are not successful, open reduction is indicated. Likewise, open operation may be necessary to correct gross malposition of large loose fragments or of the condyles.

It is our custom to perform the operation with the patient in bed with the limb supported in the splint and traction acting on the distal fragment. The operation is usually done under local anesthesia. The patient is given nembutol ($1\frac{1}{2}$ to 3 grains) and morphine ($\frac{1}{6}$ to $\frac{1}{4}$ grain) and the skin is prepared in the usual manner and the operative field draped. The skin is infiltrated with one percent novocaine and the deeper tissues are infiltrated with one-half percent novocaine. The fracture is exposed through a straight incision which extends along the lateral border of the patella and the quadriceps tendon for a distance of five or six inches or more if necessary, the center of the incision lying over the fracture. The incision is carried down through the deep fascia and the muscle fibres of the vastus lateralis muscle are cut from the lateral border of the quadriceps tendon and patel-



Fig. 2



Fig. 3



Fig. 4

ILLUSTRATIONS

Fig. 1. Severe compound comminuted fracture of the lower third of the femur involving the condyles about three weeks after open reduction in the Thomas splint with traction and primary suture of the wound.

Fig. 2. Compound comminuted fracture of the lower third of the femur with typical displacement.

Fig. 3. Same after open reduction in the splint and fastening of the condyles together with one screw and no other internal fixation as the fragments were then fairly stable.

Fig. 4. Same after union. Flexion of the knee to a little beyond ninety degrees; full extension and good power in the leg.

la and the knee joint is opened and the underlying crureus muscle is split to expose the fracture.

Hemostasis is effected and the wound is sponged or irrigated with salt solution to remove the extravasated blood and learn the details of the fracture. With 25 pounds or more of traction acting upon the distal fragment, reduction of the displacement can usually be accomplished without much difficulty; either by lifting the end of the distal fragment forwards (upward) with bone forceps or by leverage. Likewise, large fragments which may have been driven through the surrounding muscle can be put back into their normal position, care being taken not to destroy what little blood supply these fragments have left.

If the fracture involves the condyles (T or Y fractures), these are manipulated until they have assumed their normal relation to each other, then they are grasped with large bone forceps and squeezed together in anatomical position and so held until they can be fastened together with one or two screws (Fig. 3). This having been accomplished, the lower end of the femur can be treated as one fragment and the fracture reduced as described above.

If the main fracture is roughly transverse, the fragments will be fairly stable after reduction and no internal fixation is necessary (Fig. 3). If they are not stable, they may be fixed with one or two screws or loops of stainless steel wire. This need for internal fixation or lack of it also applies to the large, loose fragments. It is to be noted that since the fragments are to be immobilized by traction and the limb is to remain in the splint, not very much internal fixation is necessary.

The stability of the fragments having been established, the traction is reduced to 10 or 15 pounds and the wound is washed out with a solution of sulfanilamide and closed in layers. A rather voluminous dry dressing is applied and with an elastic bandage, the thigh is bound firmly in the splint.

In dealing with a compound fracture at this level, the procedure is just as is described above except that after the extremity has been immobilized in the splint and the traction adjusted, the surgeon proceeds immediately with the debridement of the wound and the open reduction of the fracture. After a meticulous debridement and

thorough irrigation of the wound with normal salt or sulfanilamide solution, we do not hesitate to fix the fragments with screws or wire if this seems indicated. Depending upon the amount of damage to the soft tissues, the soiling of the wound and the elapsed time between the injury and the definitive treatment; we may pack the wound open, close it with drainage down to the bone, or suture it primarily. The cases shown in Figures 1 and 2, 3, and 4 were both compound fractures and were operated upon in the splint and were closed primarily.

Postoperatively, the patients are given penicillin for from a few days in the simple fractures to about two weeks in the compound fractures. Duracillin or crystacillin or some other slowly absorbed form may be used and thus reduce the number of injections to one a day.

As was stated above, the patient remains in the splint until the fragments are firmly united (10 to 12 weeks) or he may be moved to a fracture table in from four to six weeks, and a plaster of Paris spica cast can be applied and this left on until union is firm (four to six weeks longer).

Early in the course of his treatment, the patient is taught to tense his quadriceps and hamstrings and to exercise the foot. Movements of the knee with the Pearson attachment are carried out gently each day. The exercises are increased as the convalescence progresses.

After fixation is removed, the patient remains in bed for a few days continuing to exercise the leg and then gets up in a walker or on two crutches and begins to bear a little weight on the limb. When he is up, the foot and leg are wrapped with an elastic bandage to control the swelling. The exercises are continued and the amount of weight borne on the leg is increased gradually. When the limb is quite strong, we discard first one crutch, then the other crutch and finally the cane, but the exercises are continued until the thigh muscles are well developed and the maximum range of motion is restored to the knee.

The method of operating upon these fractures in the splint with traction acting upon the distal fragment greatly simplifies the procedure and has improved our results, because the simpler we can make our surgery, the more apt it is to be successful.

CLINICAL TUMOR CONFERENCE

JAMES BARRETT BROWN, M.D.

ST. LOUIS, MISSOURI

HENRY G. BENNETT, JR., M.D.: We are fortunate in having with us today Dr. James Barrett Brown, Professor of Plastic Surgery, Washington University of St. Louis, who will give us his views on the cases to be presented this morning.

1. CARCINOMA OF SKIN OF UPPER LIP

CLAIR J. CAVANAUGH, M.D.: A. W., a 57-year-old white woman, stated that she had had a lesion, rapidly increasing in size, on her upper lip for approximately one month. At the time of admission there was a lesion, 1.7 x 1.2 cm. on the cutaneous portion of the left side of the upper lip, extending to, but not including the vermilion. It was round, ulcerated and crusted, and protruded three to four mm. above the surface. The regional lymph nodes were not palpable. The impression was carcinoma of the skin.

BÉLA HALPERT, M.D.: In a biopsy specimen there are sheets and nests of neoplastic squamous epithelial cells with a tendency for concentric arrangement and individual cell keratinization. Intercellular bridges are clearly discernible. The cell nests are within a scanty connective tissue stroma, densely infiltrated with chronic inflammatory cells. This is a carcinoma, squamous cell, keratinizing.

DOCTOR CAVANAUGH: We contemplated treating the lesion with external irradiation followed by interstitial radium.

JAMES BARRETT BROWN, M.D.: Where did this lesion first appear? Did it start in the middle of the present lesion?

DOCTOR CAVANAUGH: Apparently it started above the lesion.

DOCTOR BROWN: This woman has a carcinoma of the nasolabial fold in an early stage when it is still curable. Adequate radiation therapy is the usual procedure for it. Surgical excision would distort one of her features. Restoration of the feature would involve plastic procedures. Although the lesion is small, if not treated at once, and adequately, it will surely kill the patient just as cancer in any other location would. Frequently a lesion may be suspected of being cancerous or may be actually recognized

clinically as such. However, in every instance, microscopic examination is imperative. If the lesion is small the entire growth should be removed for microscopic study rather than taking a small segment of a minute growth.

In any event, the surgeon must be suspicious while the growth is still in its early stage and still curable. In the treatment of patients with neoplastic disease, three things are to be remembered. First, the physician must be suspicious that any lesion might be cancerous. Secondly, the diagnosis must be proven by histologic examination, either of the entire lesion or a portion of it. Thirdly, when the lesion is approached surgically, removal must be adequate and the operator must keep outside of the cancer field, in the process of removal. If irradiation is to be used, treatment must be thorough and adequate, and again carried outside of the cancer field.

2. CARCINOMA OF BUCCAL MUCOSA

HAL BURNETT, M.D.: E. W., a 56-year-old white woman, was first seen at the University of Oklahoma Hospitals, February, 1949, complaining of painful, swollen gingiva of seven weeks' duration. Examination revealed a mass about four in. in diameter, fixed, firm, and situated adjacent to the left mandible. There was considerable ulceration inside the mouth. The patient was unable to open her mouth over two cm. Roentgenograms revealed extension into the left mandible. A biopsy of the lesion disclosed squamous cell carcinoma. It was felt that the lesion was too far advanced to be surgically curable. There was no pulmonary metastasis. The patient was treated by deep irradiation therapy and apparently obtained some temporary relief. However, on her last visit on May 3, the lesion appeared more extensive than previously. Fungating areas of tissue extending through the surface of the skin overlying the left mandible were seen covered by a purulent necrotic exudate. She also had a good deal of pain during the past three or four weeks.

PETER E. RUSSO, M.D.: Films of the mandible show a destructive lesion of the horizontal ramus close to the angle of the mandible with evidence of bone destruction and little evidence of bone reaction. With the clinical history, one would think of neoplastic involvement of the osseous tissue.

DOCTOR HALPERT: The fragments of tissue that we obtained showed that it is a malignant neoplasm which seems to invade and replace some of the buccal mucosa. It is a squamous cell carcinoma with sheets and nests of neoplastic cells invading and engulfing mucous glands and their ducts. The neoplastic cells have large vesicular, deeply stained nuclei, a tendency for concentric arrangement and central keratinization. Inter-cellular bridges can be made out. This is a carcinoma, squamous cell, keratinizing.

DOCTOR BROWN: Surgically, only the most radical thing one could think of could be done. Even so, one might question whether she could survive the operation. If she did survive and during resection we did get outside of the cancer field and she recovered, there would be a major problem of reconstruction. However, it is doubtful that this growth could be completely removed surgically.

These neoplasms do not arise in the jaw primarily. They involve the bone secondarily and arise somewhere within the soft parts of the cheek or gingiva. These growths when first seen, if the examiners were suspicious, could probably be cured by wide local excision. At this stage, however, it is evident that she has such widespread involvement that the growth is not resectable.

It is true that the pressing problem of pain might be relieved at least to some extent by surgical intervention. This, however, would involve excision from the level of the clavicle with the entire side of the face up to the pharynx and the entire mandible to the chin. I feel that the possibility of cure would not justify the effort.

Interstitial radiation might give relief from the pain or it might create more discomfort if the seeds are placed around the bone. The fact that the tumor has fungated through the skin of the cheek does not make it inoperable by itself. On the other hand, it is the extension into the structures about the jaw and within the face that makes the prognosis so poor.

If one, in spite of all these objections, would consider operation, the most dangerous complication would be hemorrhage. It probably would be necessary to ligate the

common carotid and one would come dangerously close also to the internal carotid artery.

DOCTOR RUSSO: Would a frontal lobotomy relieve her pain, or even a cervical sympathetic ganglion block?

DOCTOR BROWN: I have had only slight experience with it. We do not know what change in personality is produced by it, but if anyone is a candidate for it, she would be if you decide not to operate. There is no use doing the lobotomy if one chooses local operation. It might be better to try to block off her cervical and fifth nerve areas.

JOHN F. BURTON, M.D.: I doubt that any surgery should be attempted. She should be made more comfortable. As Dr. Brown has said, the only operative procedure that would do her any good would be very radical, but I do not think it would be curative.

CLIFFORD C. FULTON, M.D.: Should tremendous doses of irradiation be given at first rather than starting with a smaller dose and letting her get out of control?

DOCTOR RUSSO: The treatment was purely palliative and therefore given in moderate doses. Irradiation could be repeated. I doubt if we could accomplish any more.

WILLIAM E. EASTLAND, M.D.: For some time we have noticed that every woman that had carcinoma of the mouth had been a snuff user. This patient also used snuff.

3. CARCINOMA OF THE LARYNX

FRANK DARROW, M.D.: B. C., a 68-year-old white man, was in excellent health until January, 1948, when he developed a sore throat. In October, the diagnosis of carcinoma of the larynx was made by biopsy. A course of palliative irradiation was begun and after three treatments the patient developed marked laryngeal edema necessitating a tracheotomy on October 22. On October 29, he was transferred to this hospital and received irradiation therapy consisting of 150 r units daily to two fields for a total of 2,600 r. This course was finished in December. During March, 1949, because of further extension, he received 100 r daily to two fields on alternate days for another 1,000 r. During April he noticed choking when he swallowed food. For the past four days this choking has become more severe and he has coughed up food through his tracheotomy opening.

On physical examination the patient was well developed, well nourished, and chronically ill. A tracheotomy tube was in place. There was a palpable node in the right jugulo-digastric area. Roentgenographic exami-

nation of the neck showed a soft tissue mass within the tracheal cartilage, that of the chest, no evidence of pulmonary involvement. On May 6, the presence of a fistulous tract extending from the lower portion of the hypopharynx into the upper portion of the trachea was disclosed by barium studies. At this time there was barium in the upper portion of the trachea.

F. A. QUENZER, M.D.: What was the laryngoscopic appearance of the lesion?

HARRELL C. DODSON, JR., M.D.: The patient was first treated at Wesley Hospital. In October of last year, a biopsy was obtained and a diagnosis of carcinoma of the right vocal cord made. At that time, a choice of laryngectomy or irradiation was proposed. He chose irradiation, and now there is extension along the area of the epiglottic fold.

DOCTOR RUSSO: The films show the sinus tract, between the upper end of the trachea and the hypopharynx, probably high at the lower level of the thyroid cartilage.

H. R. BENDER, M.D.: The tract is along the trachea and to the lower end of the thyroid cartilage.

DOCTOR EASTLAND: The patient was seen by Drs. McDonald and Huff at Wesley Hospital. There was massive involvement of the larynx with extension to lymph nodes. The growth was regarded as inoperable at the time and irradiation was started as a palliative measure. Only three treatments were given, 150 r in all, starting off gently because of fear of edema. It was necessary to do a tracheotomy. This particular tumor proved to be rather radioresistant and did not respond as some with identical structure.

DOCTOR BROWN: The thing that will save people's lives is suspicion of the lesions by the first doctor who sees the patient. In this patient there was a nine or 10 months' delay in therapy. The most important thing is recognizing small lesions. This man had one of the most curable of all carcinomas, an intrinsic carcinoma of the larynx, but now he is not going to get well. He has been turned down by a surgeon once, and the radiologists also are about to turn him down. Brunschwig and others are doing very radical extirpations. Tremendous credit goes to them. Trotter in England was one of the best throat surgeons in the world. Even in advanced cases he had pretty good results. This man might be in a category of lost patients. If anyone wanted to operate on him, he would have to start with a neck dissection on the involved side, go

clear on through and take out everything including the larynx, adjacent parts of the esophagus, and all of the soft tissues. Any remaining suspicious areas would have to be treated with interstitial irradiation. Following operation the pharynx and esophagus would have to be left open. If resection was adequate or irradiation took care of the rest, the patient would get well. He will be minus one vagus nerve but the other vagus nerve should be left. This approach should be made from the right side. One should not attempt it unless the patient or some member of his family understands the danger and the resulting disfigurement.

JOE M. PARKER, M.D.: This man has a tracheo-esophageal fistula which makes it imperative to be radical. The chance of aspiration pneumonia is considerable. That should influence the decision. If nothing is done he will not live long.

DOCTOR DODSON: We had a man last year who was not as suitable a candidate as this one. He had obstruction of the esophagus and larynx. His carcinoma proved to be extrinsic though it was thought to be intrinsic. He has since died following radical removal of the larynx and esophagus and the contents of the anterior triangle, but he did have about five months of good palliation. He had asked for something to be done because he was in such misery. I think this man will accept a radical procedure too.

DOCTOR QUENZER: Whether palliation or surgery is given, there are a few things that will help him. One is to borrow from the anesthetist the balloon they put around the endotracheal tube and put it around the tracheal tube to prevent saliva and foreign material from running down into the lungs. The other is to put a Levine tube down the esophagus to permit hypercaloric, intensive and balanced diet feedings to build him up. He has difficulty in swallowing and will not eat much without the tube feedings. Occasionally these patients will do remarkably well with a Levine tube and an endotracheal plug.

DOCTOR DODSON: This man has a Levine tube in place and has been getting 3,500 calories daily with 2 to 3 grams protein per kilogram of body weight for about four or five days, in anticipation of operation.

4. MELANOMA (?) OF SKIN OF ARM

JOHN H. CLYMER, M.D.: H. McD., a 14-month-old Negro boy, came to Surgery Clinic, May 2, 1949, for biopsy of a "wartlike growth" on his right arm. The boy's mother first noticed the growth three months ago.

The patient frequently traumatized the lesion causing it to bleed, yet it did not appreciably increase in size.

Examination revealed a warty lesion, 1 cm. in diameter, on the mid portion of the right arm. The lesion was semi-firm, non-tender, brown and elevated approximately .7 cm. above the surface of the skin. It was freely movable over the deeper tissues. The Mazzini test of the blood was negative. The hemoglobin content of the blood was 12 grams per cent. The WBC count was 10,750. Roentgenologic examination of the chest revealed no evidence of pulmonary or mediastinal involvement.

Clinical diagnosis was verruca vulgaris and a biopsy was taken.

DOCTOR HALPERT: I would have felt better if this lesion had been removed in toto. Part of the surface is covered by stratified squamous epithelium. There are some extensions of the epithelial ridges into the deeper layers and quite a variation in the thickness of the epithelium. As the denuded surface is approached there are some nests of cells which seem to have rather large, vesicular nuclei eccentrically placed with some in a state of division and also containing scattered small brown granules. The microscopic appearance of this small piece of tissue suggests that it is a malignant neoplasm, perhaps a malignant melanoma. We will cut this serially and see if we can convince ourselves that it is a melanoma.

DOCTOR BROWN: I cannot recall having seen a malignant melanoma in a Negro, but I remember a colored man who had a widespread vitiligo and was becoming white, which is pretty much the opposite.

In dealing with small lesions it is preferable to remove the entire growth than to cut into the tumor. Total excision of a small lesion is safer for the patient and is better for the pathologist who can see the skin fade into the tumor, which is of extreme importance in some instances.

Every melanoma we have seen seems to have arisen in a mole subjected to irritation. Cutting into a mole is a form of irritation. We have had four patients who have had involvement of a group of lymph nodes. On exploration they were found to be coal black from malignant melanoma. Only by subsequent direct questioning was it elicited that a mole had been removed some time ago from the region to which the nodes were tributary. This is not a point against the surgeon who removed the mole, but all suspicious moles should be examined micro-

scopically. The clinical behavior of malignant melanomas is unpredictable. After removal of the original growth, the cells may lie dormant and recurrence or distant metastasis may be delayed for ten years or longer. Pack and some others have thought in dealing with malignant melanomas that dissection in continuity is the procedure of choice. This consists of removal of the growth as well as the intervening skin, together with the regional lymph nodes. This is a radical procedure, especially for lesions about the face. Others are not so sure of this and advocate some delay even in resecting the regional nodes. I think a malignant melanoma around the face should have a complete neck dissection on that side. We reported a few such cases. In one of these a mole was irritated by peach orchard spray. It was removed with radical neck dissection. It recurred locally again and was removed. The patient is living 12 years later.

Dr. Halpert should have the whole specimen in this case to study. An axillary dissection on this little child might be the safest thing to do.

Another important thing is the question of occurrence of malignant melanoma in children. Dr. Allen in New York feels that malignant melanomas do not occur before puberty. Suspicious moles should, when evident, be removed before adolescence. One cannot tell everyone with a mole to have it taken off but we have some rules about it. If the mole is irritated, if it enlarges, becomes lumpy, or darkens, we consider these points or any of them adequate reasons for removal, wherever its location may be. The appearance of pigment means activity. If a mole becomes malignant, in removing it, one should try to stay outside the cancer field. As far as possible, the regional nodes should also be removed. If the whole growth is contained in the specimen removed the patient will be cured. If this child had a mole on his temple that was proven malignant we would consider neck dissection. Whether one should do axillary dissection on this child will be determined by Dr. Halpert's report.

DOCTOR PARKER: I would like to ask Dr. Brown how widely he would go around this lesion in excising it?

DOCTOR BROWN: On a local excision I would go well around it, 2 or 3 cm., and deep. If necessary, I would leave it open and put a graft on it.

PATRICK S. NAGLE, M.D.: I would like to ask Dr. Brown's opinion about subungual

melanomas. I have a case involving the great toe.

DOCTOR BROWN: It is possible that no far advanced melanoma of the lower extremity has ever been cured. However, there may be some. In an instance in my own family the patient survived for 12 years. The local lesion did not appear clinically malignant. There is no special difference in the malignant tendencies of subungual melanomas. Perhaps they are often not treated adequately; one does not like to go around cutting off fingers and toes. Perhaps if one would operate at the earliest possible suspicion, more people might be cured. Melanomas are deadly lesions.

In the patient you mention one should be radical in getting rid of the toe and watching the patient.

DOCTOR FULTON: What do you mean by leaving the wound open? Do you mean not to undermine the edges to bring them together or really leave it open for a short time and graft it?

DOCTOR BROWN: In closing some wounds it may be useless to pull skin edges together because of separation. If you did not want to put a graft on it, it would finally heal and could be adjusted or relaxed later. We believe in closing wounds but not causing

distortion by excessive tension and not distorting features.

DOCTOR RUSSO: We have recently communicated with Sophie Spitz at Memorial Hospital, who wrote a paper on malignant melanomas of childhood.¹ She stated that although these lesions in infants appear malignant, they do not metastasize. We had two cases in this hospital that metastasized and the infants died. Spitz and Allen questioned the diagnosis made by Dr. Halpert. We sent them the slides and they suggested that these growths were neuroblastomas, rhabdomyosarcomas, or other malignancies. We did not think that they were right and wrote them so. If they are right, in this case local excision should cure the child.

DOCTOR BENNETT: We have had previous discussions and, as Dr. Russo pointed out, our cases include necropsy studies which prove that malignant melanomas may occur in childhood and may kill the patient.

ADDENDUM: Microscopic studies of the removed lesion disclosed it to be a granulomatous lesion or rather one with the structure of a xanthofibroma, and not a malignant melanoma.

REFERENCES

1. Spitz, Sophie: Melanomas of Childhood, *Am. Journ. of Path.*, 24:591-610, 1948.

HEART DISEASE FUNDS ALLOCATED

Attacking heart disease on a nationwide scale, a total of \$8,614,737 in federal funds was awarded to 85 medical schools and research institutions in 34 states and the District of Columbia. Funds will be used for stepped-up heart research, for expanded programs of heart teaching in medical schools, and for building additional heart research laboratories throughout the country.

Oklahoma's grants for research included Paul V. Smith, Ph.D., \$15,000, "biosynthesis of tracer isotope-containing cardiac glycosides and their isolation for use in the study of distribution and metabolic fate or excretion in the animal organism;" Robert H. Bayley, M.D., \$9,555, "operating room and clinic plethysmographic studies of new type;" A. N. Taylor, Ph.D., \$5,565, "dynamics of circulation, atherosclerosis;" and for teaching, Robert H. Bayley, M.D., expanding and improving present training program, \$14,000. The three men are all members of the staff of the University of Oklahoma School of Medicine.

PHYSICIANS ASKED TO GIVE INFORMATION ON TWINS

Physicians are asked to assemble information in which one or both twins develop peptic ulcer, the site of the ulcer, the age of onset of ulcer, the type of twins (monovular or diovular), the sex of the twins, the date of birth of the twins and the number and age of the brothers and sisters and the absence or presence of ulcer in each.

The information is requested by A. C. Ivy, M.D., department of clinical science, University of Illinois, because the study of twins is of great value in providing information concerning the respective importance of hereditary predisposition and environmental influences in disease in man. The results of the use of this method have shown a hereditary predisposition to tuberculosis, diabetes, and tumor formation, and a high, medium or low intelligence quotient.

PRESIDENT'S ADDRESS

OKLAHOMA STATE MEDICAL ASSOCIATION

TULSA, OKLAHOMA

May 17, 1949

No one should enter upon the duties of this office without a keen realization of the immediately critical situation surrounding American medicine now and its likelihood of continuing for some time.

The forces within and without governmental circles are making a desperate effort to force through Compulsory Health Insurance in the present session of the Congress.

Tragic as the result would be on the quality and kind of medical care if they were successful, it would not compare to the chaos which would envelop all of us on the rapidly accelerating road to dictatorship.

There have been tremendous socio-economic changes going on in this country during the lifetime of most of us, especially since the close of World War I. These have encompassed such major problems as education of our children, installment buying, enlargement and gradual encroachment of governmental and bureaucratic agencies on hitherto personal rights and privileges, with centralization of power becoming constantly greater, loss of initiative, (exemplified by willingness to accept unemployment compensation when jobs are available); a weakening sense of responsibility of children toward dependent parents; racial segregation, mounting divorce rate, with a parallel rise in juvenile delinquency, and a recognition of the need for more equitable distribution of medical care. We cannot possibly solve all of these problems, but we can discuss together those most directly affecting American Medicine.

Much of the difficulty in this socio-economic field is directly a result of an expanding paternalism in our government and a changed attitude on the part of individuals toward accepting charity from the government as contrasted to charity from other sources. Under the heading of "public assistance" it loses its sting.

The lassitude of the individual and the failure to think of the end results which inevitably follow the government's usurping personal rights and privileges lead us stead-

ily toward complete governmental control of all our activities. To prevent the spread of such doctrine, we fought World War II. God forbid that we fought it in vain.

Governmentally controlled Compulsory Health Insurance is not merely an entering wedge, — it is the keystone of a regimented nation. If your freedom and liberties in this respect are taken over one by one your other liberties and rights will follow.

It is because of this fact that there appears in a release February 14, 1949 by Dr. George Lull, Secretary and General Manager of A.M.A. this statement — "Two of the Nation's biggest organizations — the American Bar Association, with a membership of 41,000 and the American Farm Bureau Federation, which has a membership of 1,325,826 farm families, went on record recently as definitely opposed to any form of Compulsory sickness insurance sponsored by the Government."

To quote further — "The American Bar Association plans to appoint a special committee 'to consider any proposed legislation which might conflict with the policy set forth in a resolution adopted by the House of Delegates in 1944 in which opposition of the association was expressed to *any* legislation, decree or mandate which subjects the practice of medicine to federal control and regulation beyond that presently imposed under our American System of free enterprise'."

That still other groups of our citizens are awakening to this hazard was evidenced by the recent action of the General Federation of Women's Clubs of America meeting in Florida in passing a resolution condemning ALL forms of Compulsory Health Insurance. This meeting represented some 5,000,000 American women.

The need for concern for the future of our country is daily before us in glaring headlines and editorials.

There has been a disturbing emphasis of recent years constantly paraded before the public in magazines, newspaper releases, as well as through governmental agencies, concerning the cost and distribution of medical

care. The character and form of these articles, the timing for release together with the meager and inadequate space given to correction and retraction, indicate a well organized plan behind them. In countries that have gone totalitarian in their thinking, they began early in that direction by gradually taking over Medicine — later other groups — until the final aim was accomplished.

Much of the propaganda concerning the Medical problem in this country today points, too, in that direction. If Medicine is ever taken over by governmental bureaucratic control under the heading of Compulsory Health Insurance, Socialized Medicine or Political Medicine, it will be the first great step toward a totalitarian state.

These *organized planners*, who advocate Compulsory Health Insurance, are using the cost and availability of Medical Care to the American family as the main argument in their aim of complete social and economic control. We admit the distribution of Physicians is not ideal, but very determined efforts are under way to solve that problem by encouraging communities to build small, well equipped hospitals, improving methods of transportation, placing Medical Students out with Preceptors over the state, and keeping available to rural physicians the best post-graduate instruction.

What then of the cost of Medical Care?

Let us face the facts as revealed in the Dickinson Report, published September, 1948.

For the four years, 1944 to 1947 inclusive, of the total consumers expenditures in this country, the cost of Medical Care, which includes Physicians Services, Hospitals, Drugs and Sundries, Dentists Services, and All other Medical Care was 4.15 per cent.

The cost of alcoholic beverages, 6.6 per cent; the cost of recreation, 5.3 per cent; tobacco, 2.3 per cent; and personal care, 1.6 per cent.

You see then that money spent for alcoholic beverages alone was one and one-half times as much as medical care, which included physicians services, dentists services, drugs, hospitals, etc., and that alcoholic beverages and tobacco together cost the American people more than twice as much as all medical care combined.

This is not directly a moral problem, it is here a vivid economic problem. It becomes a moral problem, however, when one

realizes that the notable accomplishments and services of Medicine to humanity in this country are pointed out as an unbearable expense, when the total cost has been only two-thirds of the amount spent for alcoholic beverages. We need to regain our sense of values. This is especially true when we realize that the cost of medical care can very effectively be met by voluntary prepaid insurance. And none of the other items can be so met.

Let us not forget that in the public's criticism of the distribution and cost of medical care today, two complaints are constantly recurring:

- a. the difficulty in obtaining medical care in the home, especially at night, and
- b. the wide variation in the cost of what appears to them to be comparable medical and surgical services.

While we know that much of the difficulty in obtaining medical services in the home is the direct result of various attitudes, demands and delay on the part of the public itself, and while we know too that it is often very difficult to judge what are comparable medical and surgical services, nevertheless such complaints should be given careful consideration, and it is *obligatory* on the medical profession to seriously study these problems and solve them through the County Medical Societies, with whatever assistance may be appropriate from the State Association.

When we awaken to the fact that attempts at governmental control of medicine is another great step in the direction of lost freedom, loss of personal initiative and the American way of life, we need to regain the vision and courage of our ancestors, and strike it dead.

It is imperative that the members of the medical profession put aside their minor differences of opinion and unite in a common effort to inform the people of this country of the stark realities which face them. The Educational Campaign of the American Medical Association seems the most practical way of doing this effectively.

Your time and your various abilities will be greatly needed. Contribute generously of these and you will come to feel that you have been a vital part in a worthwhile cause.

We earnestly solicit your thought and action on this most serious problem. Now is the time!

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RESEARCH IN THE SERVICE OF MEDICINE

President's Page

WHAT OF THE \$25.00 ASSESSMENT?

Questions are still being asked concerning its origin, purpose, use and effect on members of non-payment.

This was an act of the House of Delegates of the American Medical Association in session at St. Louis, December, 1948, to provide a fund for an Educational Campaign over the country at large to inform the public of some of medicine's outstanding contributions and accomplishments, to point out the tragic dangers of Socialized medicine and to awaken our populace to a realization that such attempts to dominate Medicine were only the beginning of a series of efforts leading to a welfare state ("scare word").

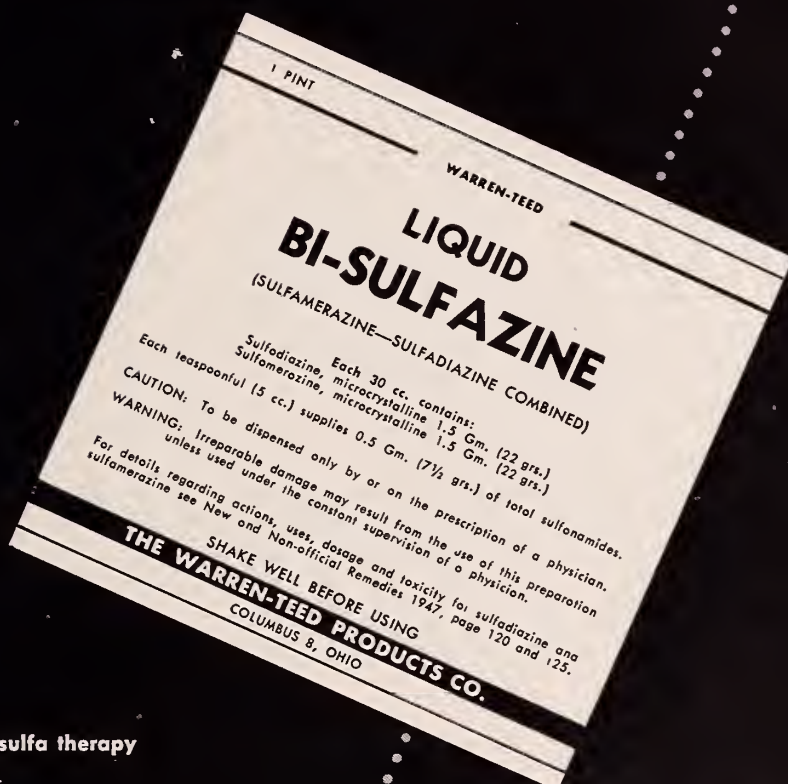
This assessment was accepted by the Oklahoma State Medical Association House of Delegates in special session and made a part of the dues and assessment of this Association, the payment of which is *obligatory* on its members if they remain in good standing, except in cases of undue hardship as determined by the local county society.

This assessment has enabled us to provide a medium for disseminating pertinent information to an increasingly concerned people. Already the effect is becoming evident. More evidence will follow.

If the House of Delegates of the A.M.A., in its next interim session in December, feels, after careful consideration, that a like or larger assessment is vital for next year's program, we in Oklahoma should give our unanimous support. It is a small contribution to make to preserve our freedom as a nation.

George H. Garrison
President.

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PUBLIC RELATIONS REPORTER

ESSAY CONTEST CLOSSES

November 1 is the deadline for the junior and senior high school essay contest conducted by the Public Policy Committee as part of the educational exhibit shown at state and county fairs in September and October. A \$100 U.S. Savings Bond will be awarded to the student writing the best 500 word essay on "Socialized Medicine: An Unsound Proposal."

Five outstanding Oklahomans have consented to serve as judges for the contest. Winner of the contest will be announced on or about December 1 and the prize essay will be published in the Journal.

LIFE EXPECTANCY INCREASES

Americans are living almost two years longer than the prewar life span, according to the most recent tabulation by the Office of Vital Statistics — further proof that scientific advancement and American medical care are adding to the life of the average citizen.

The average life expectancy for white women at birth is 70.6 years and for white men, 65.2 years, according to calculations based on 1947 death rates. In 1946, the life expectancy of white women was 70.3 — the first time life expectancy has exceeded the Biblical three-score-years-and-ten.

Life expectancy of non-white women is now 61.9 and for non-white men 57.9. The average for the nation as a whole is 66.8.

HOSPITAL INSURANCE UP

Significant increases in the number of persons in the U.S. enrolled in some form of voluntary insurance providing hospital care are noted in a newly released Health

Insurance Council tabulation as of December 31, 1948. 60,995,000 persons now are enrolled in such plans, compared to 52 million at the end of 1947.

During 1948 the number of persons with insurance covering surgical expense increased from 26,247,000 to 34,060,000. The number insured against general medical expenses increased from 8,898,000 to 12,895,000.

PRODUCING MORE DOCTORS

Real efforts are being made to increase the number of doctors of medicine, critics to the contrary notwithstanding. The recent A.M.A. Report on Medical Education indicates this fall will show a freshman medical school enrollment of about 6,900 — an all-time record. The average size of freshman classes in the 10 years before the war was 6,016.

UNSOUND TAX STRUCTURE

Medical care costs for the average person have risen in the past two decades. Much of the increase can be attributed to improvements in medical care — new medicines and technical equipment that save lives.

But the increase in the cost of medical care, and even the increase in the cost of living, are completely overshadowed by the stupendous increase in the cost of government. The following figures collected by the Los Angeles Chamber of Commerce Federal Affairs Department picture our unsound present day tax structure:

| | 1932 | 1950 |
|----------------------|----------------|---------------|
| Federal taxes: | \$1.8 billions | \$45 billions |
| State taxes: | \$1.9 billions | \$ 8 billions |
| Local taxes: | \$4.5 billions | \$ 7 billions |

ATTEND CHICAGO MEETINGS

Representing the Oklahoma State Medical Association at the Annual Conference of State Secretaries and Editors and the second annual Public Relations Conference in Chicago November 3, 4, 5, and 6 will be Lewis J. Moorman, M.D. and John W. Records, M.D., both of Oklahoma City.

Dr. Moorman, who is editor of the Journal of the Oklahoma State Medical Association, and secretary-treasurer of the Association will attend the secretary-editors conference. Dr. Records, vice-chairman of the O.S.M.A. Public Policy committee, will be the representative at the public relations conference.

A.M.A. INTERIM SESSION ONLY ONE MONTH AWAY

O.S.M.A. members are reminded of the midwinter meeting of the American Medical Association, the Interim Session, scheduled for December 6-9 in Washington, D. C.

The Washington clinical meeting will feature a scientific program for those in general practice. Headquarters for the House of Delegates session will be the Statler Hotel.



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LIFE CERTIFICATE PRESENTED PHYSICIAN IN PRACTICE 47 YEARS

Bellemont's only physician, R. A. Brown, M.D., was honored recently with an award of a life certificate for membership in the Oklahoma State Medical Association.

Dr. Brown set up practice in Bellemont, then a thriving country town, in the fall of 1902 but he'd been practicing a long time before that because "the territory was wide open — a lot of fellows were wild-cattin' as doctors," Dr. Brown recalled.

Opening a drug store in Bennington, Oklahoma, near Durant in 1891, Dr. Brown also "practiced a little medicine like everyone else but didn't go to medical school until 1889 at Chattanooga Medical College in Tennessee". He later attended Dallas and Baylor medical schools and received his degree from the latter in 1905.

COLLEGE OF PHYSICIANS HELD IN OKLAHOMA

The annual Oklahoma Regional Meeting of the American College of Physicians was held at the University of Oklahoma School of Medicine Saturday, September 10, 1949, with 150 in attendance. Physicians attending included representatives from Arkansas, Kansas, Texas and Oklahoma.

Principal speaker was William S. Middleton, M.D., F.A.C.P., president-elect of the college, Madison, Wisconsin. Wann Langston, M.D., Oklahoma City, gave the governor's welcoming address opening the meeting.

Those appearing on the program included Earl I. Mulmed, M.D., Tulsa; Philip M. McNeill, M.D., Oklahoma City; Minard Jacobs, M.D., Oklahoma City; A. W. Wallace, M.D., Tulsa; Bert F. Keltz, M.D., Oklahoma City; Alvin Rix, M.D., Oklahoma City; John R. Taylor, M.D., Kingfisher; F. Redding Hood, M.D., Oklahoma City; Frank Nelson, M.D., Oklahoma City; Dean Mark R. Everett, Oklahoma City; Carroll Pounders, M.D., Oklahoma City; J. Kenneth Thompson, M.D., Fort Smith, Ark.; Douglas M. Gordon, M.D., Ponca City; Hugh Jeter, M.D., Oklahoma City; Felix Park, M.D., Tulsa; Lewis J. Moorman, M.D., Oklahoma City; Dr. Langston and Dr. Middleton.

OKLAHOMANS ELECTED AT MEETING OF SOUTHWESTERN SURGICAL CONGRESS

L. J. Starry, M.D., Oklahoma City, was named president-elect and C. R. Rountree, M.D., Oklahoma City was re-elected secretary-treasurer at the first annual meeting of the Southwestern Surgical Congress held at the Shamrock Hotel, Houston, Texas, September 26, 27, and 28, 1949.

Organized October 3, 1948, it is composed of members from Arkansas, Kansas, Missouri, Texas, New Mexico, Arizona, Utah, Colorado and Oklahoma.

The next meeting is tentatively scheduled for Kansas City, Missouri, at a date to be selected at a later time.

O.S.M.A. MEMBERS NAMED TO ADVISORY COUNCIL

Four members of the O.S.M.A. have been named to an advisory council for the Oklahoma Commission for Crippled Children. They are members of the professional advisory committee, a group created by the last legislature to replace the old committee on standardization. The group will recommend standards for professional services rendered to children under the law and for hospital and convalescent care.

O.S.M.A. members serving on the committee are Don H. O'Donoghue, M.D., Oklahoma City; Thurman Shuller, M.D., McAlester (both terms will expire July, 1952); Wayne Starkey, M.D., Altus (term expires in 1951); A. W. Wallace, M.D., (term expires 1950). N. D. Helalud, Tulsa, who is with the Group Hospital Service, is also a member of the committee and Miss Celeste Kemler, Ada, is the sixth member of the committee.

PHYSICIANS ROLLS SWELLED AT ARDMORE

Ardmore, Oklahoma, in Carter county, now has three new physicians in practice there and several physicians have changed the location of their offices recently.

Now in practice with G. E. Johnson, M.D., is Loyd Long, M.D., a graduate of the University of Oklahoma who served 15 months as house surgeon at Grace Hospital in Detroit. He also served two years in United States Army hospitals. Dr. Long will do general surgery and medicine.

Another new physician is Malcolm Horne, M.D., who has joined the Veazey Clinic in Ardmore, and will do general practice and eye, ear, nose and throat.

Claren H. Jesse, M.D., orthopedic physician, formerly on the staff of the Army and Navy general hospital bone and joint service, is now practicing in Ardmore. He did his pre-medic work in the state of Washington and his medical training in California and Nebraska.

Joseph R. Karlick, M.D., ear, nose and throat physician and surgeon, has moved his office from the Veazey clinic to Suite 602, Little Building.



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ANNOUNCEMENTS

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, INC. Next scheduled examination (Part I), written examination review of case histories for all candidates will be held Friday, February 3, 1950. Application may be made until November 5. Application forms and Bulletins are sent upon request to American Board of Obstetrics and Gynecology, 1015 Highland Bldg., Pittsburgh 6, Pa.

UNITED STATES PUBLIC HEALTH SERVICE. Competitive examination for appointment of sanitarians (health educator) in the regular corps of the United States Public Health Service will be held on December 12, 13, and 14, 1949. Applications must be received no later than November 14, 1949.

AMERICAN SOCIETY OF ANESTHESIOLOGISTS. Annual convention. Hotel New Yorker, December 7-10, 1949.

AMERICAN GOITER ASSOCIATION. The Van Meter prize award of \$300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland is again announced. The award will be made at the annual meeting of the association which will be held in Houston, Texas, March 9, 10 and 11, 1950.

CENTRAL SOCIETY OF OBSTETRICIANS AND GYNECOLOGISTS. Oklahoma City. November 14.

EXPERIMENTAL BIOLOGY AND MEDICINE. Southwest Section. Oklahoma City, November 11-12.

COUNCIL ON INDUSTRIAL HEALTH. Tenth Annual Congress will be held at the Roosevelt Hotel, New York City, February 20 and 21.

POSTGRADUATE COURSE IN INTERNAL MEDICINE

Doctor Robert M. Becker, instructor for the postgraduate course in Internal Medicine, started his second circuit in Eastern Oklahoma on October 3. The physicians in that area report that Doctor Becker's lectures are excellent.

Both the enrollment and attendance in the first two circuits have been gratifying to the Committee. The average percentage of attendance for the first circuit was 90 and the doctors in most of the centers turned out 100 per cent for these lectures.

The second circuit will close December 16. Physicians in the surrounding circuits who wish to hear Doctor Becker before he arrives in their area are invited to attend one or more lectures in either of the following centers: Poteau, LeFlore County Health Department, 7:30 P. M. Mondays; McAlester, Albert Pike Hospital, 7:30 P. M. Tuesdays; Okmulgee, Okmulgee City Hospital, 7:00 P. M. Wednesdays; Muskogee, Muskogee General Hospital, 7:30 P. M. Thursdays; and Tahlequah, W. W. Hastings Hospital, 7:30 P. M. Fridays. The lectures in this area will be postponed the week of October 24-28 so that physicians may attend the Oklahoma City Clinical Society Conference.

Announcement for the third circuit will be made in the next issue of the Journal.

PHYSICIAN NOW OCCUPYING NEW CLINICS, OFFICES

Adding to the list of physicians with new or newly remodeled offices and clinics are the following:

W. W. Cotton, M.D. and R. W. Lowrey of Poteau, are now occupying a 14 room buff brick veneer clinic. The LeFlore County Sun published a special edition devoted to the opening of the clinic which it described as a "boon to the entire region."

A one story, 10 room structure, modernistic in style and constructed of pumice stone with cream and buff exterior finish and white trim describes the new clinic in Cordell built by L. G. Livingston, M.D.

Two brothers, W. E. Jones, M.D. and T. H. Jones, M.D., have formed a partnership and built a clinic in Seminole. The modern, buff brick building, with latest lighting, cooling and heating systems, has a full length glass front.

L. N. Dakil, M.D., McAlester, has moved into newly decorated offices in that city. The eight room suite of offices was completely remodeled and redecorated with a light green color scheme used in interior decorations. Fluorescent lighting is diffused by fluted, frosted glass wall panels in the rooms.

A. C. Fina, M.D., is now operating a clinic and hospital in Atoka. New equipment has been installed and the building has been remodeled. A 12 member staff will aid in operation of the clinic.

Each clinic has the most modern air conditioning and central heating systems with proper lighting and modern equipment.

RESOLUTION

WHEREAS, God in His infinite wisdom and mercy has seen fit to remove from this mortal life our respected colleague and friend, Dr. William Jackson Sayles, and,

WHEREAS, his untimely death leaves an aching void in our hearts, a position of industry and accomplishment in the medical life of our town, County and State societies that will be difficult to fill, a niche of competency and interest in the civic life of the community, and,

WHEREAS, the loss of his sensible judgment, perceptive enthusiasm in battling for right, truth, and justice will be keenly felt,

WE, the members of the Ottawa County Medical Society and the staff of the Miami Baptist Hospital do hereby express our sense of bereavement and,

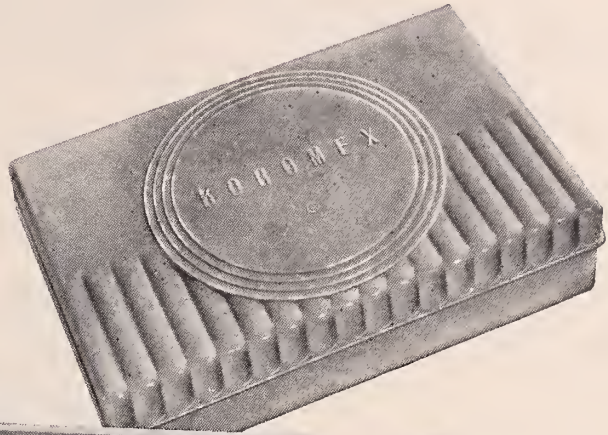
FURTHERMORE, we send to the family of our beloved comrade the expression of our feelings in deepest sympathy regarding such a worthy physician, intelligent citizen and Christian gentleman, and

NOW, THEREFORE BE IT RESOLVED, that we make known our sentiments to the bereaved family, and that a copy of this resolution be spread on the minutes of the Ottawa County Medical Society and the records of the staff of the Miami Baptist Hospital, and that the Medical Association of the State of Oklahoma be notified.

By the committee
H. W. Wendelken, M.D.
L. P. Hetherington, M.D.
Chas. W. Letcher, M.D.

/s/ Chas. W. Letcher, M.D., Secretary
Ottawa County Medical Society.

INTRODUCING...



THE KOROMEX JELLY REFILLABLE UNIT

Physicians acclaim the new Koromex all inclusive contraceptive unit. This fine container is ivory-colored plastic, permanent, dust-proof, attractive for home use and ideal for traveling. It contains two regular size tubes of Koromex Jelly which rest in individual compartments... a Koromex Diaphragm stored in the ingeniously constructed cover compartment... and a Koromex Measured Dose Plunger Applicator that rests securely on its own rack.

Where pregnancy is contra-indicated, recommend the complete Koromex Jelly Refillable Unit to your discriminating women patients. For those of your patients who require a slightly less lubricating but equally effective spermicidal preparation, a similar companion package containing two tubes of Koromex Cream instead of Koromex Jelly is also available.

ACTIVE INGREDIENTS: BORIC ACID 2.0% OXYQUINOLIN BENZOATE 0.02% AND PHENYLMERCURIC ACETATE 0.02%, IN SUITABLE JELLY OR CREAM BASES.



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MERLE L. YOUNGS • PRESIDENT

HAVE YOU HEARD?

William Loy, M.D., Pawhuska, spoke at the first PT-A meeting of that city on "Toward Better Health."

George M. Tulloch, M.D., Bartlesville, discussed the advancements that have been made in the E.E.N.T. field at a meeting of the Bartlesville Rotary Club.

Fred Switzer, M.D., Hugo, discussed the various aspects of the Choctaw County Memorial Hospital, which is now under construction, before the Lions club of Hugo.

Jack F. Parsons, M.D., has been appointed health officer at Cherokee to succeed *C. E. Cook, M.D.*, who recently resigned to return to school in New York where he will continue his study of eye, ear, nose and throat.

J. T. Terry, M.D., formerly of Ponca City, has returned there and will be associated with *Thomas McElroy, M.D.*

U. E. Nickell, M.D., Davenport, was recently featured in an article in the Chandler newspaper because of his 377 years in the practice of medicine.

N. H. Cooper, M.D., Tonkawa, recently showed a film for members of the PT-A of that city.

Royce Means, M.D., formerly of Ardmore, has opened a practice in Marietta.

Paul Kernek, M.D., Holdenville, spoke on "amateur radio" at a meeting of the Holdenville Rotary club.

Robert Hayne, M.D., Tulsa, has been certified as a diplomate of the American Board of Neurosurgery.

Fred T. Fox, M.D., Lawton, was featured in "Who's Who in Lawton" in the Lawton Morning Press.

Marcia Fite, M.D., formerly of Tulsa, has removed her practice to the east.

Robert D. Shuttee, M.D. and *James F. Taggee, M.D.*, are two of Enid's newer physicians.

Béla Halpert, M.D., formerly of the Department of Pathology, University of Oklahoma School of Medicine, left October 1 for Houston, Texas, where he will be chief of the laboratory services at the Texas Medical Center, which is the teaching center for Baylor University.

L. Stanley Sell, M.D., Oklahoma City, has moved to Idaho Falls, Idaho because of his health.

D. B. Ensor, M.D., Alva, spoke on socialized medicine before the Business and Professional Women's club of that city.

MEDICAL SOCIETIES AROUND THE STATE

Kay-Noble

The first meeting of the fall series of the Kay-Noble County Medical Society was held at Blackwell with Roy W. Donaghe, M.D., resident in pediatrics at University Hospital, as the guest speaker. Dr. Donaghe spoke on "Early Diagnosis and Modern Treatment for Polio." Nineteen physicians from Blackwell, Tonkawa, Perry and Ponca City were present.

Kiowa-Washita

Blood diserasia was the topic Stephen Beller, M.D., Oklahoma City, chose for his discussion before the Kiowa-Washita County Medical Society meeting in Cordell. Following dinner, members of the society and the Auxiliary met in the office of Gordon Livingston, M.D., for the program.

Washington-Nowata

Members of the Washington-Nowata County Medical Society discussed the special education program and films on various phases of crippled children's education were shown when the society explained the program at a special education conference in Bartlesville.

Garfield

The cancer symposium for physicians in Alfalfa, Blaine, Grant, Kay, Kingfisher, Major, Noble and Garfield counties was held in conjunction with the Garfield County Medical Society meeting September 26.

Oklahoma

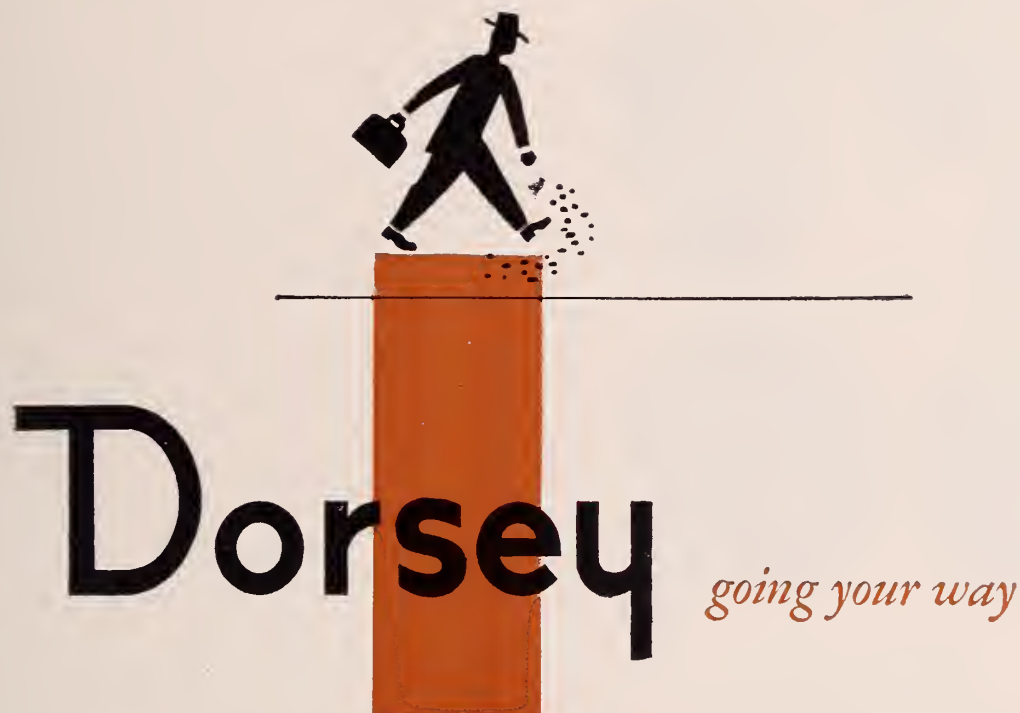
The Cancer symposium for Oklahoma county was also held at the time of the county medical society meeting, September 27. A buffet supper was held at the Oklahoma Club preceding the symposium.

Tulsa

Regular monthly scientific programs of the Tulsa County Medical Society resumed September 12. Averill Stowell, M.D., Tulsa neuro-surgeon, presented a paper on "Intractable Pain". On September 26, the society, with the American Cancer Society, sponsored a symposium on malignancies of the gastro-intestinal tract.

Carter

The 12th Councilor District meeting and the Carter County Medical Society meeting were held jointly recently. Beginning with a boat ride on Lake Murray, the group then had a barbecue supper. Walter Grady Reddick, M.D., Dallas, was guest speaker on "Migraine Headache". Following the scientific program, George Garrison, M.D., Oklahoma City, President, O.S.M.A. explained some of the problems which the council of the Association was being called upon to face and Dick Graham, Executive Secretary, paid tribute to the activities of the Auxiliaries throughout the state and explained some points in connection with the recent amendments to the basic science laws of the state.



FOLLOWING a parallel route to a similar destination, the ethical pharmaceutical maker necessarily keeps the progress and direction of scientific medicine constantly in view.

For a closer look at medicine's progress and full comprehension of its implications, the Smith-Dorsey Company has expanded its research facilities, secured increased research grants and added research personnel.



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THE SMITH-DORSEY COMPANY • Lincoln, Nebraska

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Daricraft Babies

**More and more
doctors are prescribing
Daricraft Homogenized
Evaporated Milk
for babies . . . and for
convalescent diets**

**Always uniform in quality, safe, steri-
lized, high in food value and minerals.
Contains 400 U. S. P. units Vitamin D
per pint of Daricraft. Easily digested.**



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BOOK REVIEWS

HOW TO BECOME A DOCTOR. George R. Moon. The Blakiston Company, 1949. 131 pages. \$2.00.

The author has done an excellent job of summarizing and answering the many problems which confront the student wishing to enter the field of medicine. He has carried the student from the high school requirements through residency, all the while presenting and answering questions and giving advice which, it appears, is most worthwhile.

In his discussion on quantitative requirements for admission to medical school it is pointed out that the high school student should prepare himself for entrance to college with three objectives in mind, namely, 1. to build an intellectual foundation upon which his professional training will rest, 2. to develop good study habits, and 3. to maintain grades which will permit him to enter the college of university which will give him the best pre-medical training possible and which is the "preferred" university of the medical school he has chosen.

Immediately after admission to college the student should determine the admission requirements of the medical school of his preference and proceed to adjust his college subjects accordingly. His electives should be all inclusive of the general culture fields, literature, fine arts, social sciences, etc., insofar as is compatible with obtaining a bachelor's degree, which, since World War II, has become an unwritten prerequisite for admission to medical school. For veterans it is explained that USAFL, V-12 and ASTP courses, as well as courses taken at army universities, are universally accepted.

With regard to choosing a medical school, certain facts should be pointed out to the student. In these days of an oversupply of applicants, there are a large number of students with high enough qualifications to be considered acceptable to almost any medical school in the country. This group may be particular in choosing their schools, although the end results of the various training programs throughout the country are remarkably similar, as demonstrated by state board tests and the national board examinations. The great majority of students, however, have one certain factor which exerts a great influence upon their choice of a medical school. This factor is the matter of which school will accept him, and it should be noted that state supported schools take very few if any of their students from other states. Also to be considered is the matter of fees and location. Thus, a student's best chance of acceptance lies in his own state school, to say nothing of lower cost.

The author has included a complete list of approved medical schools in the United States, containing location, history, minimum admission requirements, size of classes, and annual fee of each approved school.

Suggestions are made for securing and completing the application for admission, stress being laid on neatness of correspondence and careful adherence to directions. Actual samples of preliminary letter, application form, photograph, letter of recommendation, confidential report on candidate for admission, and college transcript are supplied and advice is given with regard to securing these documents.

The importance of the interview of the applicant is pointed out, and advice is given regarding personal appearance and actions of the applicant when appearing before the committee. Above all, he should be neat, clean, and modestly dressed, and should act natural.

during the interview. All questions should be answered clearly and fully.

Sample questions of the Medical College Admission Test are given, and the use of the test by the admissions committee is explained, along with their evaluation of the applicant from other data such as interview, grades, recommendations, etc.

Mention is made of the difficulty of a young woman's obtaining admission to a medical school. Only five to 10 per cent of the total students are women, the reasons for which are explained.

Success or failure in medical school depends upon the individual and his accomplishments. Students are not accepted and then dropped because they don't have "pull" with some politician or doctor. Students fail because of a great variety of reasons, such as violent love affairs, family mishaps, employment, poor study conditions, health, worry, emotional upsets, and loss of interest and initiative. Certain of these conditions can be foreseen by the student and he should prepare himself to allay these difficulties should they arise. Once a student has been dismissed from a medical school, he will find few opportunities to return to the study of medicine.

There are a number of problems facing the medical student which are not commonly found in ordinary liberal arts work. One of the first problems to be met is fees. They are usually somewhat more than the student is accustomed to paying, varying from \$200 to \$800 per year. A medical student must also buy from \$300 to \$400 worth of equipment and spend approximately \$300 on books. In the case of a student who must seek outside employment, he must be careful to arrange his working hours so that his study time and hours of sleep will not be interrupted. The student's health should be one of his prime considerations, and use should be made of the excellent health service offered by all medical schools.

This book presents an outline of courses as recommended by the American Association of Medical Colleges and a general consideration of instruction during the years of medical school. Internships, residencies, and fellowships are explained and methods of obtaining them are discussed.

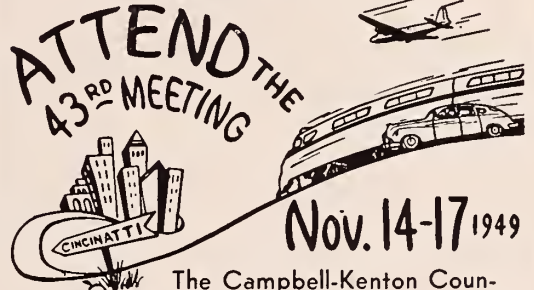
Similar advice is offered students wishing to enter the fields of dentistry and pharmacy. The schools are listed and methods of applying for this work are explained. There is a general discussion of the methods of training, and of the duties of the practicing dentist and pharmacist. Also, short summaries of other professional fields closely allied to allopathic medicine are presented. There are veterinary medicine, osteopathy, optometry, chiropody, medical illustration, nursing, occupational therapy and hospital administration.

—John R. Findlay.

REPRESENTS O.S.M.A.

Charles E. Green, M.D., Lawton, represented the Oklahoma State Medical Association at the second annual Conference for Physicians in Schools at Highland Park, Illinois, October 11, 12, and 13.

Your Membership in SOUTHERN MEDICAL ASSOCIATION IS VALUABLE



The Campbell-Kenton County Medical Society of Kentucky is the host Society. It is a Kentucky meeting.

THE VALUE OF MEMBERSHIP IN MEDICAL ASSOCIATIONS AND ATTENDANCE AT MEDICAL MEETINGS

SUCCESS, whether measured by achievement, confidence gained, or by monetary standards, comes largely through achievement and maintenance of competence. A physician, like persons engaged in other fields of endeavor, must keep abreast of the latest developments and methods in his field in order to maintain competence.

THE SOUTHERN MEDICAL ASSOCIATION was founded in 1906 for the purpose of developing and fostering scientific medicine and surgery in the South and in its forty-three years of existence has never deviated from this objective. Through attending the annual meetings of the Southern Medical Association and by reading *The Southern Medical Journal*, thousands of physicians of the South are taking an important step toward achieving and maintaining their competence in the constantly changing field of medicine.

REGARDLESS of what any physician may be interested in, regardless of how general or how limited his interest, there is always a program at the meeting and articles in the *Journal* to challenge that interest.

THE MEETING this year will be composed of thirty-two sessions of the twenty-one sections, two General Clinical Sessions and two conjoint meetings. Eligible members of state and county medical societies in the South should be and can be members of the Southern Medical Association. The annual dues of \$5.00 include the *Southern Medical Journal*, a journal that should be a "must" on every physician's reading list.

SOUTHERN MEDICAL ASSOCIATION
Empire Building
BIRMINGHAM 3, ALABAMA

BOOK REVIEWS (Continued)

ORAL AND DENTAL DIAGNOSIS. With suggestions for treatment by Kurt H. Thoma, D.M.D., F.D.S.R.C.S. Eng. Third edition. 563 pages. 776 illustrations, 60 in color. Philadelphia and London. W. B. Saunders Company. 1949. Price \$9.50.

In this third edition, the author has brought up to date his new material on prevailing methods of treatment in the fields of dentistry and pharmacy. The schools are ment, and has added considerable to the previous editions on this phase.

He continues to place the principal emphasis of the book on diagnosis, and Part I deals entirely with principals and methods of examination and diagnosis. Part II is much more lengthy, and deals with the special diagnosis of dental and oral lesions and suggests treatment procedures.

Profuse with illustrations, many of which are in color, the manner in which the author describes each subject, and discusses the clinical symptoms, etiological factors, and the treatments, makes the book most interesting and helpful.

For the student, it becomes a most valuable reference book, and for the practitioner, whether he be a physician or dentist, it would be equally valuable. For it is seldom that a man would acquire the knowledge from his own experience to gain familiarity with the wide variety of symptoms associated with diseases of

the mouth. Years of clinical experience, and attendance at many hospitals would be required.

Special emphasis is placed on this well recognized fact: that the relation of oral infection to general disease is an important factor in diagnosis. So many cases present themselves to a dentist, without the knowledge of any trouble, and the oral manifestations visible to the naked eye, when observed by a careful operator, might easily be caught and treatment advised, thereby saving many lives.

Attention is also given to the importance of the presence of oral foci, potential sources of systemic disease, and the necessity of diagnosing and eliminating such foci.

It would be difficult to give any detailed review of any particular section of the book, since it covers such a great variety of conditions. But to this reviewer, the subjects most interesting and helpful were the sections devoted to Diagnosis of Disease of the Oral Mucosa, Lips and Tongue, and the other on Tumefactions of the Oral Mucosa, Lips and Tongue. These discussions should be of special value to a dentist, because the ability on his part to recognize such lesions as these can lead to a correct diagnosis, and the necessary treatment prescribed while the lesions are still at the stage when successful treatment is possible.—

—R. M. Dunn, D.D.S.

THE DALLAS SOUTHERN CLINICAL SOCIETY

ANNOUNCES

Fall and Winter Postgraduate Courses in Dallas

CARDIOLOGY

Dr. Myron Prenzmetal: Associate Professor, Clinical Medicine, U.C.L.A. Medical School
Melrose Hotel and Parkland Hospital, November 28, 29, 30, December 1, 1949

OBSTETRICS AND GYNECOLOGY

Dr. Conrad G. Collins, Professor of Obstetrics and Gynecology,
Tulane University, January 9, 10, 11, 1950.

FOR RESERVATIONS ADDRESS: 433 MEDICAL ARTS BUILDING, DALLAS 1, TEXAS

TWENTY-FIVE YEARS AGO

DR. R. L. GEE, Hugo, suffered the loss of his house by fire last month, but was covered by insurance.

DR. E. F. MILLIGAN, Geary, has returned there, after practicing a short time at Oklahoma City.

DR. F. A. HUDSON, Enid, recently spent a two weeks' vacation on a hunting trip in New Mexico.

DR. H. C. MANNING, Cushing, spent several days at Chicago recently, taking some special work in surgery.

DR. M. B. GLISMAN, Okmulgee, has returned there with his family, after several months practice at Arkansas City, Kans., and resumed practice at 400 East 7th St.

CUSHING MUNICIPAL HOSPITAL is being dressed up at last. The city has started the work of beautifying the grounds, with trees, sod, and various plants. The institution, as an open hospital, is progressing nicely on its second year.

CLASSIFIED ADS

FOR SALE. Lucrative practice open in Colorado. Home, furniture, and office, and equipment for sale by widow. Write Key R, care of The Journal.

LOCATION WANTED. Internist with three years specialized training Temple University desires association with five to seven man group. Married, Veteran. Available for interview immediately. Write Key P, care of The Journal.

LOCATION WANTED. Retired active physician-surgeon wishes steady appointment in public or private institution. Small salary. Write Key Z, care of The Journal.

WANTED. Experienced general surgeon to be associated with a well established general practitioner. Excellent hospital facilities and income. Give age, qualifications, and experience in first letter. Write Key W, care of The Journal.

POSITION WANTED. Accountant for hospital or clinic. Experienced in office management, costs, pay-rolls and taxes. Hospital references. Write Key P, care of The Journal.

FOR SALE OR LEASE. 17 bed general hospital. \$40,000 gross per year. Write Key L, care of the Journal.

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Rexair Can Do**

Next time you house-clean, pause a moment by a sunlit window. You will see thousands of dust mores floating in the beam.

Light does not produce this dust. It is everywhere in the air you breathe. Conventional methods of cleaning often fail to eliminate it, by letting dust filter back into the air you breathe.

Wouldn't you like to clean *clean*? Wouldn't you like to know that the dust you remove from floors, carpets and furniture is eliminated from your house forever? You can—with Rexair.

Rexair has no bag. It uses a pan of water to trap dust and dirt. Wet dust cannot fly, and dust cannot escape from Rexair's water bath. You pour the water down the drain, and pour the dirt away with it.

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FREE BOOK—Send for this colorful, illustrated 12-page book. Shows how Rexair does all your cleaning jobs, and even "washes" the air you breathe. Ask for all the copies you can use. No obligation.



Rexair



WORLD TRAVELER . . . Dietary Dub

Food customs? He can describe the bill of fare in far away places some people never heard of. His personal eating habits, however, are those of most men in public life—a feast when the hectic schedule permits, just a bite here and there between times.

And like innumerable others who will not or cannot eat properly, these are the half-well, half-sick cases you recognize as subclinical vitamin deficiencies. Your first move

in such cases is dietary reform, but when it comes to the right vitamin supplement, remember the name Abbott. In the complete Abbott line are single and multivitamin products . . . in

liquid, capsule and tablet form . . . for oral and parenteral use . . . for supplemental and therapeutic dosage. Your pharmacist can supply them in a variety of package sizes.

ABBOTT LABORATORIES, North Chicago, Illinois.



SPECIFY

ABBOTT Vitamin Products

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

BEFORE THE DEPARTMENT OF JUSTICE

As early as February, 1949, the Chicago Sun-Times carried a headline which read "See Trust Suits for Medics". At that time it was said that "The government plans to crack down on alleged anti-trust practices of several state medical associations". Since then occasional newspaper reports have appeared, and finally on September 26 the American press carried this announcement: "An FBI agent Monday said a nationwide investigation is underway to see if there are any anti-trust violations within the medical profession". . . It's just an inquiry; there is nothing alarming about it."

Ostensibly this investigation has been provoked by the profession's alleged monopolistic practices in the operation of "group health and prepaid medical plans" but in truth it is reasonable to believe it is the Administration's retaliation because of the medical profession's organized fight against compulsory health insurance. The medical profession's interest in the health of the nation and the welfare of the people and its responsibility in connection with this time honored guardianship raises objection to any form of medical practice not in keeping with the accepted principle of good medical care whether it be individual, group or government care.

Standing on these principles, the Association confidently gave its records for investigation. We have prized the spirit of service that has channeled through the office of the Association during the past decade. The writer having daily devoted much of his time to the interests of the Association during the past 10 years has observed that dominant spirit always militant in behalf of the people. Without exception, the State Journal has championed the cause of the people. With Hippocratic zeal the staff of the Association placed the interests of the people above those of the profession. In the light of this spirit of service in behalf of

the people, without sacrilege, it may be said that the Oklahoma State Medical Association's arraignment before the Department of Justice is comparable to the cause of Christ before Pilate.

Assuming the Association is found guilty of the alleged crime of trying to preserve the integrity of medical care for the safety of the people and remembering that this is the same medicine that has doubled longevity in the past few generations and comforted and cared for the sick from the time of birth to the last round-up, could the crime be any worse than that of the ambitious bureaucrats who, though wholly ignorant of medical science and its possibilities, have openly advocated legislation that would hamstring medical service and enslave the people through federalized medicine. It is well to strike a serious analytical attitude and calmly compare the motives of the bureaucrats as they seek to destroy medicine as a free enterprise, with the motives of the medical profession as it tries to keep America's medicine free from destructive influences: Every physician in the land should help the people realize that medicine is on trial and the people should consider the issues and decide who should be investigated.

Is it not time to wake up and take a level look at present political trends with the hope of doing something about the government. Already we are far on the road to socialism, otherwise this harassing of a great free enterprise which has continuously and consecutively served the nation without watching the clock could not have occurred. After all, the people must decide whether they want politics, power and police, or science, sense and sentiment with their medicine.

Under the shadow of the strong arm of Federal investigation the membership may count on the militant pursuit of the truth with the hope that justice and freedom may prevail.

THE HEALTH EXAMINATIONS

Good physicians agree that people should have periodic examinations to determine the individual's state of health, his physical and psychological fitness in connection with the duties of his profession or occupation. Such an examination should be designed to discover all pathological conditions and the examining physician should discuss his findings and his recommendations with the person examined or with responsible members of the family.

Such examinations are fraught with many problems and the complete performance places upon the examining physician heavy responsibilities. Often the examinee is overimpressed with the meaning of such an examination and may expect more protection than such a performance can give. While the examiner is warranted in stressing the importance of health examinations, often he is guilty of not explaining their limitations. If the patient is in the hands of a good physician, he can expect the examination to discover any existing pathological conditions and if nothing abnormal is found he is reasonably safe in placing his faith in the clear bill of health he receives. But he should be told that such a bill of health is no guarantee against the occurrence of disease between his periodic health examinations whether they are quarterly, semi-annual, or annual. Symptoms and even signs of carcinoma may develop any time after a negative health examination. This is equally true of many other conditions. The writer recalls that acute appendicitis, developed in twelve hours after a health examination had placed the seal of approval on a proposed trip around the world. The appendix was removed and the patient caught the boat. Even though some serious condition develops months after such an examination, the patient may be ready to say, "This is strange. I had my annual health examination only three months ago. Why didn't the doctor find out about this?". The patient should know the physicians' limitations and nature's way of slipping in a blow when nobody is looking. It is equally necessary for the physician to make sure the patient understands the cost of the health examination. It is impossible to have fixed fees for all cases. Though the physician may venture to suggest an average fee, the history of the case may make it necessary to employ unanticipated laboratory procedures and the physical examination may reveal conditions calling for additional tests.

Under such circumstances the cost mounts as the examination is pursued and the examiner should discuss the indications and make sure the charges are understood and accepted. If this plan is followed, the bill when rendered is not likely to reach the Grievance Committee and the medical profession will not be openly condemned at the cocktail hour.

It is the physician's duty to encourage periodic health examinations as the best insurance against disease and its consequences. At the same time the physician must protect himself, his profession and his patient by explaining the purposes, advantages and limitations of such examinations. It is likewise important to make sure the patient understands the necessary steps and the cost. Finally, if the health examination functions adequately, it must be carefully and deliberately conducted with the education of the patient holding high rank among its objectives.

THE MODERN LEVELER

Nearly one hundred years ago the socialistic trends of our government were so well described by Henri Frederic Amiel, reprinting seems justifiable.

"The modern leveler, after having done away with conventional inequalities, with arbitrary privilege and historical injustice, goes still farther, and rebels against the inequalities of merit, capacity, and virtue. Beginning with a just principle, he develops it into an unjust one. Inequality may be as true and as just as equality; it depends upon what you mean by it. But this is precisely what nobody cares to find out. All passions dread the light, and the modern zeal for equality is a disguised hatred which tries to pass itself off as love."

Shall we continue to play the puppet while bureaucracy pulls the threads?

D. W. GRIFFIN, M.D.

On Saturday, October 9, at 4 p.m., Dr. Griffin rounded out 50 years of service at the Central State Hospital. Considering his long term of meritorious administrative and clinical services in the development of this great institution, it would be easy to translate the letters M.D. as Man of Destiny. The medical profession and the people of Oklahoma owe a debt of gratitude to this great physician. His name and his career will have a durable place in the history of Oklahoma.

FATIGUE

Passing over the complicated mechanisms involved in an attempt to understand the physiological process connected with fatigue and sidetracking a discussion of chemical fatigue such as that following sulfa drugs, sodium bicarbonate and other medicaments which may alter the utilization of oxygen; also omitting the difficult problem of "mental fag" this discussion is being devoted to dangers of physical fatigue as a contributing factor in the development of infectious diseases and its diagnostic importance in the presence of such diseases. It may be said that expenditure of energy through long, continued physical effort or even temporary outbursts of bodily exertion may favor infection and progressive disease. The former chiefly through lowered resistance and the latter possibly through the speeding up of the respiratory and circulatory functions of the body, thus augmenting the degree of infection and accelerating its dissemination. It is thought that overwork of the pulmonary system may reactivate a quiescent or arrested tuberculous lesion.

Fatigue may figure as a diagnostic symptom in many diseased conditions and it should never be treated lightly even though its presence is discovered only in the course of careful history taking. A mounting fatigue is unusually the first and most common of all the symptoms of tuberculosis. It is much better to discover it early, determine its cause and in the case of tuberculosis, anticipate dangerous effects, than to await the disaster and then trace the previously unheeded fatigue back to its ominous origin. This brief discussion with the toxic fatigue of tuberculosis as a striking example has been presented with the hope of placing the clinician on guard and spurring the research worker toward a better understanding of a difficult problem which becomes ever more important in a fast moving, energy consuming mechanistic world.

Osler says of a young woman — the medical assistant of Mundinus, the modern anatomist at Bologna — "She died, consumed by her labors, at the early age of nineteen, and her monument is still to be seen".

MEET OUR CONTRIBUTORS

Alfred R. Sugg, M.D., Ada, is the author of "Neuroptosis in this issue of the Journal. Dr. Sugg was graduated from the University of Arkansas and served his internship at St. Vincents Infirmary, Little Rock. Dr. Sugg is a Mason, past president of the Ada Kiwanis Club and Past president of the Chamber of Commerce and has held various positions in the county and State Medical Association including vice-speaker of the House of Delegates. He has been certified by the American Board of Urology. Dr. Sugg served in World War I.

P. E. Russo, M.D., F.A.C.R., Oklahoma City, wrote "Roentgen Ray Diagnosis of Pulmonary Metastases" in the December Journal. Dr. Russo was graduated from St. Louis University School of Medicine and limits his practice to his specialty, radiology. He is a member of the American College of Radiology, American Roentgen Ray Society, Radiological Society of North America, and Oklahoma Radiological Society. He has been certified by the American Board of Radiology. Dr. Russo is chairman of the department of radiology, University Hospitals; president, Oklahoma State Radiological Society; and state councilor, American College of Radiology.

Bert F. Keltz, M.D., Oklahoma City, wrote "The Management of Diabetes Mellitus". He was graduated from the University of Iowa in 1928 and his specialty is internal medicine. Dr. Keltz has been certified by the Board of Internal Medicine and is a member of the American College of Physicians, American Diabetes Association, American Heart Association and the American Therapeutic Society.

Paul E. Craig, M.D., Tulsa, is the author of "The Use of Sulfamylon-Streptomycin Mixtures in the Prevention and Treatment of Local Infections". Dr. Craig was graduated from Northwestern University School of Medicine and his specialty is surgery. Before coming to Tulsa, Dr. Craig practiced at Winneconne, Wis., Philadelphia, Pa. (where he took one year's graduate training in surgery); Coffeyville, Kansas; and the U. S. Army Air Corps. He is a member of the American Academy of General Practice, Mississippi Valley Medical Writer's Association, Aero Medical Association and the Oklahoma Academy of Science.

Charles Ed White, M.D., Muskogee, wrote "The Use of Saddle Bolck Anesthesia in Small Institutions" in this issue. Dr. White was graduated from the University of Tennessee in 1923 and his specialties are obs-gyn and pediatrics. Before coming to Muskogee, Dr. White practiced in Pawhuska. He has been president of his county medical society, a member of the house of delegates for 12 years and chairman of the section on maternity and infancy and child welfare. Dr. White is a member of the Oklahoma State Board of Health, Southern Interurban Obs.-Gyn. Club, Oklahoma City Obs.-Gyn Society, Southern Medical Association and the American Congress of Obs.-Gyn.

John E. Horn, M.D., Muskogee, is co-author of "Use of Saddle Blocks for Obstetrics in Small Institutions—A Preliminary Report of Observations in 132 Cases". Dr. Horn received his B.S. degree from Northeastern State Teachers College, Tahlequah, and was graduated from University of Oklahoma School of Medicine in 1941. Dr. Horn interned at Emergency Hospital, Washington, D. C. and is a captain in the reserve corps.

SCIENTIFIC ARTICLES

NEPHROPTOSIS*

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Nephroptosis has been described for so long and so often, and is so well known that another report on the condition and measures for its correction can not be hailed as news. It would seem that by this time the indication for operation of nephropexy and the technique for its accomplishment should be at least as well standardized and accepted by most surgeons as is the operation for goiter or gallbladder, to name only two. Such is far from the case.

I frequently hear heated and acrimonious debate, even among urologists, as to the indications for the operation and even wider divergence of opinion as to the proper method of doing it. If the urologists cannot agree, it is hardly to be expected that the internists and others should approach the problem from anything like a common point of view.

One factor that contributes to this confusion of opinion is the well-known fact that some distinguished surgeon, having expressed himself in a paper, acquires a number of disciples who follow the advice of the master indefinitely, though, in many instances, by the time they are expounding his theories vociferously, the master himself has completely abandoned the particular procedure. For example: Horsley and Biggers¹ text states the operation is seldom indicated and remark that it formerly had great vogue for many symptoms caused by nervous conditions, stasis, or other inter-abdominal lesions. Of course, this was written at "low-tide" but, nevertheless is accepted as gospel by many adherents and is a normal reaction to the abuse of the procedure a few years previously.

Nephroptosis came into the limelight along with visceroptosis in general, when

the x-ray became a common instrument. There was a wave of enthusiasm for tacking up everything that seemed to have slipped down a few centimeters and to attribute all sorts of symptoms to minor displacements of viscera.

Of course, the position of the kidney has no connection with its function. Its chief business is to rid the blood stream of unwanted products of metabolism, and as long as it does perform that function, it makes no difference if it is behind your ear. The chief factor that determines whether a nephroptosis is surgical or not, depends upon the normal functioning of the kidney, and often this function depends upon the accompanying pathological conditions, such as perirenal adhesions and fibrosis, aberrant vessels, rotation of the kidney, etc.

Occasionally, as pointed out by Van Duessen,² the very weight of the kidney itself, when it has been robbed of its normal supporting structures, produces sufficient pull on fibrous bands connected with the duodenum, to produce definite and clear-cut symptoms that are generally accepted as due to disturbances about the duodenum, or at least of the G.I. tract.

If the ureter is fixed and the kidney movable, the urine is required to flow uphill, around the curve, and down to the bladder. This will not go on for long without some chronic back-pressure, stasis, and the resulting infection which most frequently serves to bring the patient to the physician's office.

It is sad to relate that often where the symptoms are clear-cut and the findings are conclusive enough to indicate ptosis of the kidney and its resulting complications are at fault, that 25 per cent or more of the patients have been treated for months and

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1949.

years, and frequently have been operated for every sort of pelvic and abdominal condition without relief of any kind.

One of the most practical suggestions I can offer, therefore, in connection with nephroptosis, is to admonish you to think about it. Once that is done and a few simple procedures followed, the indications for surgery are not difficult to make out.

Chronic pyuria will almost always result from stasis. Pyelectasis, or moderate hydronephrosis will almost always be present from chronic obstruction, and these are really the basic pathological findings.

Hydronephrosis will often produce pain. Flareups or acute exacerbations of chronic pyuria will produce the symptoms common to any infection.

With a known ptosis, this chronic pyuria, and the frequent exacerbations of acute infection, limited to this one side, is always a finding. If there is also definite evidence of back pressure, evidenced by pyelectasis, and if there is pain especially when the patient is up and is relieved by lying down, if the hydronephrosis is progressing, and if the ureter is long enough to permit replacement of the kidney to its normal position, I hold these findings alone to be sufficient justification for nephropexy. The condition may be bilateral, but is by far more frequent on the right side.

I doubt if there are cases limited to subjective symptoms alone which require surgery, because the situations described above will produce objective findings plenty soon, and until they are present, it is folly to expect to clear up the ills of a psychoneurotic individual, who has been told by some careless doctor that she has a floating kidney.

How are these tests confirmed? An x-ray examination of the urinary track, with intravenous dye, being sure to do a flat picture before the dye, and to take one or more in the upright position, and to take a delayed film at least 20 minutes after the dye has been injected, is the first procedure. A normal kidney will be empty of dye in 20 minutes, or less. Disregard the degree of the ptosis, and look for evidence of infection and obstruction.

Each case should be checked with cystoscopic examination and retrograde pyelograms, bilaterally.

It is always wise before operating a kidney, to know for certain the condition of the non-operative side. It is of great importance to secure a divided specimen for microscopic examination, and it is particularly im-

portant to determine definitely the size and length of the ureter, else the surgeon may be embarrassed by attempting to replace a floating kidney that in reality is an ectopic one, and, if in that event he is not embarrassed, he should be.

Once the case has been carefully selected, and it is agreed that the ptosis is pathological and is producing morbidity, we are amazed to find an extreme divergence of opinion as to the efficacy of nephropexy.

One group reports a large series of operations, with up to 98 per cent satisfactory results. One man even said 100 per cent. That is a good score in any league, and such reports can be put down as pure propaganda, or to a perverted opinion as to what constitutes success.

During the same decade, other groups condemn the operation without reserve. Mayo Clinic reports only 21 pure nephropexies done there in the decade from '35 to '45.

These reports, of course, serve to confuse the student of the subject, but they are not so far apart as would at first appear, because of the lack of agreement of definition of terms.

Pure nephropexy has a rather rare indication, since in the great majority of cases, some other minor pathology is present. For example: rotation, periureteritis, fibrotic band, aberrant vessels, etc., which are given sufficient status to take the credit for part of the symptomatology, rather than attributing it all to the ptosis itself.

Having carefully selected the patient for nephropexy, the type of operation is, of course, of great importance. I wish to present a method which is simple, safe, and satisfactory, requires no special equipment, no unusual surgical skill, and most important, at least will do no harm.

I fully believe that when baskets, hammocks, etc. are used, even in the most skillful hands, many failures will be inevitable. I likewise can see no excuse for traumatizing, injuring and perforating the kidney.

If the ureter is sufficiently free, and a complete uterolysis should be done, removing all fibrous bands, aberrant vessels, etc., and if the case is really ptosis, the kidney will easily fall into its fossa. The trick is to keep it there.

You have all seen mechanical devices of all sorts used, and in my opinion, the reason the operation has so often fallen into disrepute, is because of the attempts made to artificially support the organ with these artificial and extraneous devices.

If the kidney is sutured in an abnormal position, pain can be expected. There is no way of splitting the capsule, or perforating the kidney parenchyma itself, without inevitable damage, sometimes with serious complications.

It is wise, therefore, to permit the kidney to fall as naturally as possible into the bed, and to depend on biological and natural processes to keep it there. To this end, the kidney is completely stripped of fat, especially the posterior surface, but the pedicle itself need not be so treated. Mild irritation of the capsule with gauze sponge hastens inflammatory adhesions, but care should be used not to injure the kidney.

The next step: the kidney fossa should be stripped of fat, so that the kidney when replaced, comes directly into contact with the muscle of the lumbar area. We have all used fat to prevent adhesions of tendons, and if not, we have at least used grease to keep the beans from sticking to the skillet. We cannot expect adhesions to form with a double layer of fatty tissue interposing, but when the fat has been removed, a very short time only is required to fix it, and if you do not believe it will stay fixed, undertake some time a few months later to remove it. At the same time, it is not rigidly fixed, and slight movement on respiration is still possible.

Greota's fascia which has been opened to expose the kidney, is now plicated beneath the kidney in the most obvious manner. Of course, if this fascia had remained intact, and had not stretched, there would be no ptosis in the first place, but this structure is entirely too flimsy to produce a basket with enough strength and stability to hold the kidney up. It does, however, serve admirably to hold the kidney in position temporarily, especially with the patient in bed during convalescence.

It is important for the kidney to be placed in its natural position in the fossa, and no attempt should be made to force it to lie otherwise. It might be argued that the

position being somewhat abnormal should be corrected, but the shape of the kidney, the length of the pedicle, scoliosis of the spine, and pressure from abdominal organs, cannot be altered by the surgeon, and it is better to try to get along with the evitable and compromise, rather than suffer complete defeat.

The textbook picture, and a preconceived notion of what a pyelogram should look like, are poor criteria for our guidance, and postoperative pain is not a factor unless the organ is forced into an abnormal position with reference to its bed.

One thing for sure, this method has done no harm. It is easy of accomplishment, and we have used it with great satisfaction for many years. Of course, our series is small, but it is large in comparison with those done in a large clinic where 400,000 operations are done, with only 21 nephropexies.

Barasch,³ at the Mayo Clinic says that the operation there is about 50 per cent satisfactory.

This method will produce a very much greater degree of success than that. As a matter of fact, I have yet to see a complete failure, and such partial failures as have been seen, can often be accounted for by not having adhered strictly to the indications set out above for the operation.

I have made no attempt to review the subject and give a lengthy bibliography. This is available to each of you. Likewise, I am not presenting this technique as original. Deming,⁴ to mention only one, has taught practically the same thing for a long time. The series has been watched for several years, and the results are generally permanent.

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A.M.A. INTERIM SESSION

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EVALUATIONS OF METHODS OF PROSTATECTOMY*

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The word prostatectomy is a misnomer. We do not remove the prostate gland. We merely remove a tumor mass out of the middle of it. Four ways of doing this have been developed since modern surgery began to be practiced. Two of them are quite old and two of them are of comparatively recent date. They are:

1. Perineal.
2. Suprapubic.
3. Transurethral.
4. Retropubic.

This paper is an attempt to point out the difference between these methods and to give the indications, contra-indications, advantages and disadvantages of each. Each operation is still indicated for certain cases and every urologist should be competent to choose and carry out the correct method for the particular case under treatment.

PERINEAL

Even in the time of Hippocrates doctors were in the habit of "cutting for stones". These cuts were made through the perineum because this was the safest place to go at that time. It continued to be the safest place until the development of modern aseptic surgery which allowed men to go near the peritoneal cavity without particular danger. Since the enlarged prostate gland could be easily felt through the rectum it was only natural that this would be the first method of approach. The earlier attempts at this kind of surgery were rough, unscientific, and often left the patient incontinent or otherwise maimed. In those days of filth, disease and short life span, this was the best that could be done. There came a time, however, when Dr. Hugh Young studied out the anatomy of the perineum and developed an approach through lines of cleavage which would not injure the rectum or go into the peritoneal cavity. When he had finally perfected the operation, it was quite satisfac-

tory in that it totally removed the obstructing lesion, did not leave the patient with loss of urinary control, and was so safe that even in the far advanced cases seen in that day the mortality was two percent or less. There was little or no pain after the operation, and the patients usually healed up in three to four weeks. The advantages of this operation, therefore, could be summarized as follows:

1. Low mortality, approximately two percent.
2. Complete removal of the enlarged prostatic tissue.
3. Painless convalescence.

The bad features of it were:

1. Difficult dissection requiring special training both of surgeon and assistant.
2. Occasional urethrorectal fistula which was almost impossible to close.
3. Occasional destruction of all sexual sensation.
4. Occasional incontinence.

These last three objections grew less important as the operator gained skill and experience though they still continued to happen infrequently. Methods of repair of the fistulae were developed and it was discovered that by bringing the levator ani muscles together in the midline after the prostate was removed, incontinence no longer resulted. After this the operation was quite satisfactory and was particularly indicated in cases where previous suprapubic operations had left large ventral hernae or where there had been previous pelvic cellulitis or peritonitis, rendering it almost impossible to make a satisfactory exposure of the bladder from the front. It was also indicated in cases of early carcinoma of the prostate where radical removal was desired. Carcinoma of the prostate usually starts in the posterior portion of the gland and by dissecting the rectum loose from it, it is quite feasible to remove the entire gland along with the seminal vesicles. Statistics on the cases handled in this manner have shown

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that quite an appreciable percentage of them were permanently cured of their cancers. The matter is still open to investigation.

SUPRAPUBIC

In 1895 Fuller described the suprapubic method of enucleation of hypertrophied prostate. It gained little headway, however, until 1900, at which time Freyer again reported cases of it and since that time it has been widely accepted. The technique consisted of opening the bladder from the front, running two fingers inside it down to the prostate and of breaking through the mucosa and enucleating the enlarged masses while another finger was inserted in the rectum and pushed upward against the enucleating finger. The operation was easily done and there was no danger of incontinence, loss of sexual power or of injury to the rectum. However, there was much hemorrhage and shock and patients often died of infection or uremia a few days after the operation. At first the only method of controlling hemorrhage was by packing the cavity with gauze. This was later supplanted by a rubber balloon bag, long clamps, or even open ligation as practiced by Hunt of the Mayo Clinic. As time went on it was found that a two stage operation was safer than a single stage one; that is, the bladder was opened and allowed to drain for 10 days or so, then through the same incision the prostate was enucleated. Later on the use of intravenous glucose, blood plasma, sulfa drugs and antibiotics have made it possible to control infection so that the two stage operation has been practically abandoned and the bladder is now closed fairly tightly with only a small catheter draining it, which is removed in two or three days. Twenty years ago the mortality was somewhere between 15 and 20 per cent over the entire United States. Today it is about six per cent. The indications for this operation are:

1. Very large prostate gland, particularly those which project into the bladder cavity.
2. Prostatic obstruction accompanied by stones in the bladder which are too large to crush and wash out.
3. Severe strictures or injuries to the urethra which will not permit the passage of instruments into the bladder.

The contra-indications of this operation are:

1. Median bar enlargement or fibrous enlargements of the prostate.

2. Carcinoma of the prostate, early or late.

The great advantage of it is its easy performance and the lack of necessity for special instruments. It can be done in any hospital by any surgeon with ordinary surgical instruments. This very fact, however, makes it dangerous because many men have done it who did not understand the management of such cases and deaths have ensued because of their inability to control post-operative hemorrhage or because of uremia. In the earlier years of its use the suprapubic fistulae often took three to six weeks to heal, thus rendering it a very expensive operation for the patient. Sometimes they did not heal at all because of strictures or fibrosis developing in the bladder neck. Control of hemorrhage in this operation was then and still is difficult even though today we have balloon catheters and oxidized gauze of many kinds which can be packed in the cavities and left. It was a good operation for its day but it has not a single advantage which is not also possessed by the retropubic method.

TRANSURETHRAL RESECTION

During the past 20 years transurethral resection has jumped into the leading place in the treatment of prostatic obstruction. By this method an instrument is passed into the bladder through the urethra. This instrument carries a cutting wire loop, a lens system and a light which permits the removal under vision of small pieces of tissue. Bleeders can be controlled by coagulation, and the process can be carried on for one or two hours if necessary until all the obstruction is trimmed out. The operation can be easily learned by any one familiar with the cystoscope. It has the great advantage of being comparatively bloodless, shockless and painless. The hospital stay is short, being six to 10 days on the average. The immediate mortality is about two per cent in the best clinics. It is an ideal method for palliative removal of cancerous obstruction or for median bar obstructions where the prostate is not truly enlarged. What then are its disadvantages? They are:

1. It requires a large outlay for equipment much of which must be in duplicate because of the danger of electrical breakdown during the operation.
2. The urethra is often damaged by the passage of such a large instrument, rubbing off the mucosa and causing post-operative strictures.

3. The tumor is not all removed but is simply trimmed smaller and continues to grow, necessitating sometimes second, third or even fourth operations.
4. Infection in the bladder persists for months afterwards, leading to ill health of all kinds.
5. Immediate or delayed hemorrhages are very common. Sometimes they are massive and the patient must be placed back on the table, given another spinal anesthetic to control them.
6. Incontinence is occasionally seen due either to taking out too much tissue or leaving an irregular surface so that the urethral mucosa cannot come together smoothly. Occasionally the prostatic lobes which are left will fall together in the middle and adhere, forming a bridge across the urethra which must later be trimmed out.
7. The post-operative care of such cases is long and arduous. Due to stricture formation and infection in the bladder they must be seen at intervals for two or three months afterwards. This is hard on the doctor and expensive for the patient.
8. It is commonly recognized that the mortality is very high for the first hundred cases any urologist does, then drops as he gains skill and experience. This is true even though he has been associated with and helping a more skilled man for a prolonged period. It is simply a difficult operation to learn to do well.
9. Recalling the above sequellae which follow transurethral resection rather than other methods of prostatic surgery, it is easy to see that some of these cases may go home and die within a few months after operation without ever coming back to the urologist for follow up treatment. I am quite convinced that if accurate statistics were obtainable at the end of six months following resection there would

be another one or two per cent mortality added to what we now call the mortality following resections. I am very sure that in my own cases this would be true, and I believe that I have been as successful with them as any one. The true mortality from the transurethral resection, therefore, should be something like three to five per cent rather than one to three per cent. Also it should be stated that even among those who survive, the functional results are not as good as are seen in those where the entire gland enlargement has been removed.

With all these considerations against it and with no particular advantages except that it is not an open operation and that the patient is easily persuaded to undergo it, one is reminded of the proverb "all that glitters is not gold". The indications for this operation are

1. Median bar.
2. Advanced or doubtful carcinomatous enlargement of the prostate.

The contra-indications are:

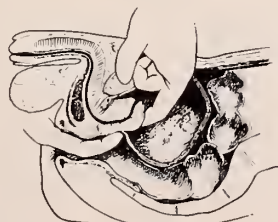
1. Urethral strictures.
2. Glands irregularly enlarged so that the instrument cannot be passed into the bladder.
3. Massive enlargement of the prostate gland.

RETROPUBIC

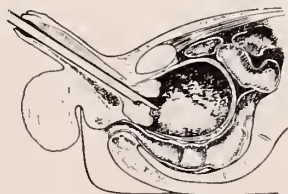
The fourth method of attacking the enlarged prostate gland was first presented to American urologists by Millin, of London, some two years ago. He reported a series of about 400 cases in which he had incised the anterior abdominal wall suprapubically, then had peeled up the bladder and peritoneum from the pelvic bones pushing them upward and backward until the space of Retzius was large enough for him to see and feel the enlarged prostate gland with perfect ease. He had then cut directly across the front half of the gland, exposing the enlarged portion and shelling it out through



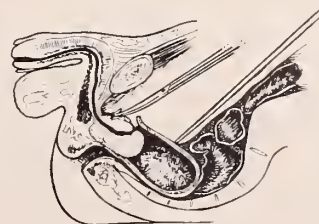
1 Perineal Prostatectomy
MORTALITY 2%. HOSPITAL: 20-30 DAYS.
DANGER INCONTINENCE, RECTOURINARY FISTULA.
INDICATION SCARRING OF SUPRAPUBIC AREA, EARLY CARCINOMA.



2 Suprapubic Prostatectomy
MORTALITY 6%. HOSPITAL: 14-20 DAYS.
DANGER HEMORRHAGE, INFECTION.
INDICATION: LARGE PROSTATE, STRICTURE OF URETHRA, STONE IN BLADDER.



3 Transurethral Prostatectomy
MORTALITY IMMEDIATE 2%, LATE 4%.
HOSPITAL 10-12 DAYS.
DANGER RUPTURE OF BLADDER, URETHRAL STRICTURE, HEMORRHAGE, RECURRENCE.
INDICATION FIBROSIS, MEDIAN BAR, SMALL ENLARGEMENTS.



4 Retropubic Prostatectomy
MORTALITY 5%. HOSPITAL 12 DAYS.
DANGER NONE.
INDICATIONS: ALL ENLARGEMENTS EXCEPT FIBROSIS OR MEDIAN BAR, WITH OR WITHOUT STONE.

this incision. He had then stopped all bleeding by coagulation or ligature, placed a catheter through the urethra into the bladder and closed the incision across the prostate by running sutures. The bladder and peritoneum were then allowed to fall back into place, and the abdominal wall was closed leaving in a simple rubber tissue drain for two or three days. The patient had suffered no shock or hemorrhage, was able to void as soon as the catheter was removed, was out of bed in four to six days and could go home in 10 or 12 days. Nothing had been opened except the abdominal wall and the prostate. All work was done under vision and there was no follow up treatment necessary, no stricture, no incontinence, and no hemorrhage. There was no injury to the rectum or to sexual power, and the entire tumor was permanently removed. In other words, it had all the advantages of the suprapubic enucleation without the disadvantages. In suprapubic enucleation the work was done by touch and hemorrhages could only be stopped with great difficulty. By this method the work was done both by touch and by vision and bleeders could be easily seen and picked up or coagulated. At the same time stones, bladder papillomata or diverticuli could be taken care of with greater ease than could be the case through an opening higher up in the bladder. Through the same incision the lower third of the ureter could be exposed and stones removed from it in case any were present. The mortality on a series of 1500 cases collected by Millin was 5.3 percent.

This operation is now being done in many clinics and has gained rapidly in

popularity. It is easy to do and easy to teach. It is practically foolproof, is done in one stage and has as low a mortality as could reasonably be expected in doing surgery on men of this age. I have adopted it for all prostate cases except median bar enlargements and am more pleased with it all the time. Its advantages are:

1. Ease of performance.
2. Shortness of hospital stay, being about twelve days.
3. Permanence of result.
4. Control of hemorrhage.
5. Low mortality.
6. No sequelae.
7. Little or no post-operative pain.

Contra-indications to its use are:

1. Small fibrous glands which cannot be shelled out.
2. Median bars.
3. Advanced carcinoma.

These are all best handled by resection except in cases where strictures or injury to the urethra prevent insertion of the instrument.

In view of the foregoing considerations it may easily be seen that when a case of prostatic enlargement is referred to a urologist, it may not always receive the same type of treatment as others. Sometimes one method of handling it is advisable and at other times another method is advisable. This being true, it is not well for the referring physician to insist on any particular method as is sometimes done. The thing we all wish to do is the very best possible operation for the particular patient under treatment and since there are four different ways of going at it, it is well to be more or less familiar with each of them.

CLINICAL SOCIETY PATHOLOGICAL CONFERENCE DIAGNOSIS GIVEN

For the information of those who had to leave the October meeting of the Oklahoma City Clinical Society before the Clinical Pathological Conference, the pathological diagnosis was acute hemorrhagic pancreatitis. In a beautiful step by step presentation of the story, Dr. Newburgh arrived at the correct diagnosis, it was reported by Ben H. Nicholson, M.D., 1949 Oklahoma City Clinical Society President.

THE MANAGEMENT OF DIABETES MELLITUS*

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By September 16, 1921, it was clearly demonstrated by Banting and Best that an effective anti-diabetic hormone could be extracted from the pancreas. The first diabetic patient received the material on January 12, 1922, and by January, 1923, insulin was provided to about 250 physicians for clinical trial.^{1 2} By 1935 Hagedorn and his associates had developed a clinically successful longer acting insulin known as protomane insulinate.³ In the summer of 1936 this preparation and various modifications were made available for clinical trial in this country, and in 1937 the preparation Protamine zinc insulin appeared on the market for general use. Another preparation, Globin insulin, intermediate in action between the quick acting regular or crystalline zinc insulin and the longer acting protamine zinc insulin, has been on the market for several years. A new preparation, known temporarily as NPH 50 has been studied in recent years. It is being clinically investigated on a limited scale in this country and may appear on the market in the future.^{4 5}

The discovery of insulin has stimulated a vast amount of experimental and clinical investigation of diabetes mellitus. The disease can now be produced experimentally five ways in animals.⁶ These are by the removal of at least nine-tenths of the pancreas, the injection of anterior pituitary extract, the injection of alloxan, the prolonged injection of glucose intraperitoneally, and the injection of uric acid. The disease has been induced temporarily in man by the administration of a purified preparation of adrenal corticotrophic hormone.⁷ Clinically there has been a change in our concepts of the diabetic diet and the use of insulin. The development in chemotherapy and antibiotics has been of great value in modifying the course and outcome of infections in diabetics. There has been evidence that the use of hormones in the pregnant diabetic has lowered the incidence of miscarriage and stillbirth. There has been a great reduction in the mortality from diabetic coma and recently interest has been directed toward

the importance of potassium and phosphorus deficiency in severe coma. Of great importance have been the studies of the high incidence of arteriosclerosis and its resultant complications in the diabetic patient.

In view of these recent advances, the availability of insulin for 25 years and protamine zinc insulin for over 12 years, it is not inadvisable to review some of the principles of the management of diabetes mellitus.

DIAGNOSIS

Early diagnosis and vigorous therapy directed toward control of the diabetes are vital to an improved outlook for the diabetic patient. The survey made by The United States Public Health Department in Oxford, Massachusetts, in 1947 disclosed one undiagnosed diabetic for each identified diabetic.⁸ It is estimated that the number of potential diabetics is even greater and that about 4,000,000 persons, or three per cent of our population, may eventually become diabetic. The American Diabetes Association has sponsored its first drive for early diagnosis of diabetes mellitus. We as physicians should see to it that every patient coming to our office has a test for glucose in the urine. Known diabetics should be encouraged to test the urine of their immediate families and relatives. The presence of glycosuria should suggest the possibility of diabetes, but the diagnosis rests on an abnormal blood sugar, over 120 mg. per cent fasting, or 180 mg. per cent post-prandial on venous blood by a reliable technic. Borderline patients should have a glucose tolerance test.

THE OBJECTIVES OF THERAPY

Having made the diagnosis of diabetes mellitus, what is the therapeutic objective? The answer appears simple, namely, control of the disease by an attempt to restore a physiological normal. This, after all, is the aim of therapy in any disease, and a physiological normal would include blood sugars within normal limits, the urine free of sugar, the patient in good health and free of complications. Normal growth and development are to be desired in the juvenile diabetic. Far too often the patient of middle age has been told that he has a "little sugar"

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but that it will not bother him. He may even be advised to "leave off sugars and starches." A few years later this patient may develop gangrene or other complications which might have been avoided had the diabetes been controlled. After following the same dabetics for a period of many years it is impressive to learn that complications, such as acidosis, skin infections, and gangrene, as well as other arteriosclerotic complications, are much higher in a careless or ignorant diabetic than they are in those who make every attempt to keep the diabetes under control as measured by glycosuria and hyperglycemia. It is true that the smaller per cent of diabetics, especially the juvenile and young adults, are very difficult to keep under control, regardless of the cooperation of the patient. Some physicians have recommended the use of free diets in diabetics or have suggested that glycosuria and hyperglycemia are not harmful as long as the patient maintains normal weight and is free of ketone bodies in the urine. It would seem the burden of proof is upon them. It will be necessary to demonstrate that such patients over a period of 20 years show a lower incidence of complications than those who make a serious effort to keep their diabetes under control.

DIET

Diet is still the keystone of treatment in diabetes mellitus. Some adults can be controlled very well by diet alone; children, never. Since the discovery of insulin the diabetic patient has been allowed a more liberal diet and therefore is more willing to follow it. A so-called "leave off" diet, in which the patient is told to leave off "sugars and starches" and eat anything else that they want, is to be condemned. It is possible to outline a practical diet to fit the individual patient and still be definite as to the types and amounts of food he is to have. The diet should either be measured or weighed, depending upon the severity of the diabetes and the intelligence of the patient. It is not necessary to teach the patient the rather complicated process of partitioning the diet into carbohydrates, proteins, and fats, but in working out the diet the physician should see to it that the patient receives an adequate amount of proteins and the appropriate amounts of carbohydrates and fats, with calories sufficient to maintain an ideal weight and in children to allow for normal growth and development. Certain modifications of the diet may have to be made to fit the individual activities of the

patient and the type or amount of insulin he is receiving. All patients receiving protamine zinc insulin should have a bedtime lunch of foods providing slowly available carbohydrate such as bread and milk, in order to prevent nocturnal hypoglycemia. It is important, especially in physically active children and young adults, to allow additional food for extra physical activity.

INSULIN

Previous reference has been made to the fact that we now have four kinds of insulin on the market and in the future there may be a fifth preparation available. The four that are now available are regular insulin, crystalline zinc insulin which acts essentially the same as the regular, globin insulin, and protamine zinc insulin. Each of these come in 40 units per c.c. and 80 units per c.c. strength. Therefore, it is readily understandable that both the physician and the patient may be confused. On the other hand, the various kinds and combinations of insulin make it possible for us to fit the preparation to the individual patient with improved control of his diabetes. The majority of adults who require insulin can be best controlled on protamine zinc insulin alone. Young adults and juvenile diabetics can rarely be controlled on the slow acting insulin alone and require regular or crystalline zinc insulin in a separate injection, or mixed with the protamine zinc insulin. If mixed insulin is used the best results are obtained by mixing in the syringe at the time of injection two parts of the quick acting or regular insulin and one part of the protamine zinc insulin. Frequently in juvenile diabetics a small dosage of the quick acting insulin may have to be given before the noon or evening meal.

Certain everyday problems arise associated with the use of insulin which must be kept in mind. Insulin reactions are frequent and should be prevented because upon occasion they may be very serious. They are commonly due to unusual physical activity without allowing extra food, failure to eat meals regularly, failure to take a bedtime lunch, or an error in the strength of the insulin or inadequate knowledge of the type of syringe which is being used. The American Diabetes Association has recently recommended that insulin syringes be graduated in either a 40 unit per c.c. or an 80 unit per c.c. scale.⁹ These are now on the market and if universally manufactured will eliminate confusion. In patients who have recently started insulin therapy there may

be an improvement in the diabetic control necessitating a reduction of the insulin dosage. It is of importance to realize that it may take several weeks to arrive at a proper dosage of insulin for such a patient. Insulin atrophy occurs in approximately 25 per cent of the patients, especially in the younger age group. Its cause and prevention are unknown and it may occur with the use of any type of insulin.

COMPLICATIONS

Diabetic Coma should be recognized as an acute medical emergency and the patient immediately hospitalized for treatment. The mortality rate increases with the duration of acidosis, the increasing degree of unconsciousness and the presence of vascular collapse and oliguria. The decided reduction in the mortality rate in the past 10 years has been due to early administration of large doses of quick acting insulin in addition to the long recognized value of adequate amounts of parenteral fluids and gastric lavage.⁶ Constant clinical observation of the patient in diabetic coma with frequent estimations of the blood for sugar and the carbon dioxide combining power as well as the urine for ketone bodies are necessary for determining the treatment from hour to hour. The use of intravenous glucose before the blood sugar approaches normal not only interferes with the laboratory gauge of the patient's progress but may lead to an increased mortality rate.¹² There is some evidence to suggest that it may be a factor in precipitating acute potassium deficiency.¹³ The report of Holler and others has called attention to the importance of potassium and phosphorous deficiency in severe diabetic coma.^{10 11} Clinically it is manifested by sudden development of muscular weakness. Flaccid paralysis may progress to respiratory paralysis and a fish mouth facial expression. Treatment used has been potassium orally or intravenously. Potassium containing foods such as orange juice and oatmeal if fed to the patient early may prevent this uncommon complication.¹³

Infections are common in the unrecognized and poorly controlled diabetic. Early recognition and treatment with chemotherapy and antibiotics have dramatically reduced the morbidity and mortality from local infections such as carbuncles, boils and abscesses. Systemic infections such as pneumonia and brucellosis for which we have specific antibiotic therapy no longer represent the serious danger to the diabetic that they formerly did. It is important however

to remain alert to the fact that severe infections often necessitate the use of large amounts of insulin to prevent the development of acidosis. In addition to a single dose of protamine zinc insulin two or three daily injections of quick acting insulin may be advisable.

Gangrene continues to be one of the common and serious complications in the older patient. In known diabetics this can largely be prevented if the patient follows carefully described instructions for the care of the feet. Every attempt should be made to avoid mechanical, thermal, chemical and bacterial injury. The use of antibiotics in the early stage of soft tissue and bone infection of the extremities has saved many amputations. Their use has also made it possible to perform amputations at lower levels. Root has reported a high incidence of successful transmetatarsal amputations upon patients who formerly would have had amputations at higher levels.¹⁴

Pregnancy is increasingly common in diabetics for there is an increased number whose disease is sufficiently well controlled to permit ovulation. However the incidence of fetal mortality has varied from 30 to 60 per cent. Priscilla White in studying the hormonal imbalance in diabetic pregnancies found that when it was abnormal the fetal survival was only 47 per cent. Substitutional hormone therapy consisting of estrin and progesterone was given to 147 cases with an increase in fetal survival to 90 per cent.¹⁵ Regulation of the stilbestrol dosage was controlled by serum levels of chorionic gonadotropin and proluton by urinary determination of pregnandiol. In spite of the fact that the use of hormones in diabetic pregnancies has been somewhat controversial, White's statistics cannot be ignored. The problem is currently being studied by several groups.

Surgery of any necessary type can be performed on a diabetic. The patient should not be in acidosis at the time of surgery and facilities should be available for closely following the progress of the diabetes. The decision as to the use of the quick or long acting insulin post-operatively depends upon the type of operation and the necessity for the prolonged use of parenteral fluids. If food may be taken orally shortly after operation the usual dosage of protamine zinc insulin may be continued. If a prolonged period of parenteral fluids is necessary quick acting insulin before each infusion of glucose is more satisfactory.

Arteriosclerosis is the most serious complication in the diabetic of today. This is especially true of the young diabetic who has lived 20 years after having developed the disease in the juvenile period (under 15 years of age). White and Waskow have reported a study of 200 such patients and found that 92 per cent showed evidence of vascular disease manifested by retinal arteriosclerosis, retinal hemorrhages, calcified arteries, hypertension, albuminuria, coronary insufficiency or cerebral vascular accidents.¹⁶ Kimmelstiel and Wilson have described intercapillary nephritis.¹⁷ It is a specific pathological finding in the kidneys of diabetics who have had the disease for several years before coming to autopsy. The cause for the high incidence of vascular disease in diabetics as well as arteriosclerosis in non-diabetics is unknown. A low incidence of coma in the eight per cent of White's and Waskow's series who showed no demonstrable vascular damage suggests that the diabetic control is a factor. It will be of interest to compare the results of a similar study after 20 years of protamine zinc insulin therapy with its improved diabetic control. In the meantime there is plenty of evidence to suggest that every possible effort should be made to keep the juvenile diabetic as well controlled as possible.

EDUCATION OF THE PATIENT

The physician's responsibility to the diabetic patient does not end with establishing control of the disease. The patient and a responsible relative should be taught the details of the diet and the use of insulin. Periodic tests of the urine should be made by the patient and in certain instances he may be taught to vary the insulin dosage on the results of these tests. The development of the simple and reliable Clinitest for estimating urine sugar has simplified this procedure for the patient. The diabetic should have the opportunity to obtain such knowledge of the disease as he can grasp and become aware of the value of good diabetic control in the prevention of complications. The symptoms of the common ones such as hypoglycemia and acidosis, their cause, prevention and treatment need to be explained. The danger of infections and the necessity for early treatment deserve emphasis. Older individuals should be especially instructed in the care of their feet. And finally, the uncomplicated diabetic deserves every encouragement to live a normal, active and productive life. There is no necessity for assuming the role of an invalid. It is important to

devote special effort toward educating the parents of juvenile diabetics to prevent the unfortunate psychological attitudes of over-indulgence or rejection. There has been a gradual change in the attitude of the public toward diabetes. The cooperative patient may obtain life insurance and employment is becoming less of a problem. Vocational Rehabilitation has been of help in training handicapped diabetics for limited types of work. Perhaps another generation will see the disappearance of the stigma too often associated with the diagnosis of diabetes.

PROPHYLAXIS

Although we do not have a full knowledge of the etiology and pathological physiology of diabetes mellitus, we do have unquestioned clinical evidence of the importance of heredity and obesity. Every opportunity should be used to caution the patient and his relatives of the relationship of obesity to the development of diabetes. Interesting studies have been made which indicate that most women who develop the disease after childbearing have given birth to babies over 10 pounds in weight. This may have been one to 46 years before the diagnosis of diabetes.¹⁸ The obstetrician might suggest to the mother bearing large children that she will have less chance of developing diabetes in the future if she maintains a normal weight.

CONCLUSIONS

The past decade has been marked by improvement in diabetic therapy. Other advances in medicine and surgery have reduced the mortality and morbidity from complications in the diabetic. Continued effort should be made to keep the disease well controlled in the hope of preventing vascular damage. We should make a special effort to search for the unrecognized diabetics.

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USE OF SADDLE BLOCK FOR OBSTETRICS IN SMALL INSTITUTIONS*

A Preliminary Report of Observations in 132 Cases

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It is not the purpose of the authors to go into the history of the use of saddle block analgesia in obstetrics other than to state that Adriani and Roman-Vega¹ coined the term to designate spinal anesthesia limited to the lower spinal segments. Most reports on the use of saddle block in obstetrics have been from the larger institutions and have led general practitioners to believe that the technique of its use in labor is complicated as well as dangerous. In this preliminary report of 132 cases, without a single failure, we hope to point out the simplicity and success with which the saddle block may be used in small hospitals.

The senior author has gone through all the various anesthetic agents that have been used in the relief of pain in childbirth, i.e., chloroform, ether, twilight sleep, nitrous oxide, ethylene gas, Gwathney, paraldehyde, and caudal. After 25 years of personal observation, it is his belief that saddle block is by far the safest of all anesthetics for the mother and baby, and if correctly administered, gives relief quicker than any other type of anesthetic.

Our technique for saddle block varies from that formerly given by most authorities in that we use heavy Nupercaine** in glucose as described in the original technique of Parmley² and Adraini¹.

Barbiturates and demerol are used for early labor pains. Since the threshold for pain is variable no routine is followed. The saddle block is not administered until the contractions are well established (approximately five minutes apart); the cervix is well effaced, that is six to eight cm. dilatation in the primigravida, and four to six cm. in the multigravida. If the baby is a persistent occiput posterior and descends in this position (this in our experience causes more pain to the patient), we frequently do a saddle block when the cervix is three or four cm. dilated. We agree with King and Dyer³ that there is a marked tendency to slow labor if the block is given too early. We have for this reason occasionally found it necessary to use intranasal or subcutaneous pituitary extract. While we have encountered no difficulties, pituitary extracts are not without their dangers. However in a saddle block there are extra safety factors

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**Heavy nupercaine solution was supplied by Ciba Pharmaceutical Products, Inc., Summit, New Jersey.

due to an easily dilated cervix and a relaxed perineum.

If the patient is expected to deliver in a short time, and the block is wearing off, we do not repeat the spinal injection, but finish the delivery with ethylene gas and oxygen. This gives complete relief to the patient and does not asphyxiate the baby. Repair is then made with the use of the remainder of the saddle block. However, if it is evident that she will not deliver for quite some time, we always repeat the block. In our series, the effect of saddle block with the use of adrenalin combined with heavy nupercaine lasted on an average of three and one-half hours.

METHOD OF ADMINISTRATION

(With variation from that outlined by Parmley and Adraini²).

Blood pressure is taken on admission of the patient and again immediately before the block is started.

Step 1. One and one-half cc. of heavy nupercaine together with three or four mm. of adrenalin is drawn into the syringe before doing a lumbar puncture.

Step 2. Puncture is performed at the level of the iliac crest (or in the fourth interspace). If difficulty is encountered the third interspace is used.

Step 3. Injection is made to the count of one-and-two-and-three, which is completed in two or three seconds.

Step 4. Patient remains in a sitting position for exactly 30 seconds.

Step 5. The patient is placed in a recumbent position immediately with two pillows placed under her head. This recumbent position is retained for at least 15 minutes, as complete analgesia is established by that time.

Injection should not be made during a contraction. In a few instances the analgesic effect was "spotted". This is apparently due to the administration of the nupercaine just before or after the patient had a contraction. In these patients the lack of analgesia was noted to be on the left side. When the patient was moved from one side to the other momentarily, the anesthesia became complete.

All patients are given intradermal skin tests for nupercaine, ergotrate, and pituitary extract when first seen. The reason for this is to determine the sensitivity of the patient to these drugs. We have had several patients that are sensitive to one of the three. It is our opinion that most of the

headaches that frequently occur from the use of saddle block are often due to a sensitivity to one of the three drugs. It is well known that many patients cannot be administered a local anesthetic because of the reaction that occurs following the use of the anesthetic agent. To illustrate this observation; a patient we delivered this year had a severe headache following delivery. We had previously delivered her under caudal, and a migraine type of headache followed. Naturally, we suspected that the caudal was the causative factor. Her last delivery was under ethylene gas, oxygen, and paraldehyde with recurrence of the headaches. This patient was later found to be sensitive to ergotrate. In our small series in which all the patients have been skin tested, not one has had a headache following delivery.

In our early use of heavy nupercaine we frequently had blood pressure drops of 10 to 20 mm. All drops were not as severe, nor did they cause the apprehension in the patient that occurred in caudal anesthesia, but constant attention of the anesthetist was required. We now use three to four minims of adrenalin in the nupercaine, and 25 mg. of ephedrine are given intramuscularly 15 minutes prior to the administration of the block. This prevents a marked fall in blood pressure. We do not give the ephedrine in hypertensive cases. The use of adrenalin definitely prolongs the anesthetic effect of the block. This fact first was observed by Richards⁴ in 1911.

It was first suggested by the early investigators that one cc. of heavy nupercaine be used for the saddle block. In our experience we have found that it requires one and one-half cc. of heavy nupercaine instead of one cc. to reach the level of the fundus. One cc. of the drug usually rose to the level of the umbilicus and pain was always felt above this area. However, in the very short individual one cc. of heavy nupercaine is usually adequate.

Walter C. Rodgers⁷ agrees with Ebersole that "in spinal anesthesia it is not the anesthetic agent which is dangerous, but rather the careless anesthetist". Clifford B. Lull⁸ definitely hits the crux of spinal anesthesia when he states: "To have a careful administration of any anesthetic agent is far better than giving antidotes".

Our percentage of occiput posterior positions is approximately that reported by other writers. With a relaxed perineum rotation of the occiput, either by forceps or manually, is fairly simple. After the patient has com-

plete anesthesia, we use supra-fundic pressure with outlet forceps. An episiotomy is done routinely on all primiparas and those having had a previous episiotomy. However, in a relaxed perineum, the line of incision for the episiotomy should be more carefully watched since relaxation may lead one to make the incision more laterally than would occur with tonicity of the perineal muscles. In our observations the use of intravenous injections of ergotrate after delivery has not retarded the expression of the placenta in caudal and saddle blocks, as has been suggested by other writers.

CONCLUSIONS

After many years of using and observing the safety and effectiveness of various types of anesthetics given in obstetrics, we find that the saddle block fulfills both requirements of the mother and the baby more adequately than any other method used.

It is effective within two or three minutes after it is used.

The technique of administration of saddle block is simple and is well adapted to use in small hospitals. The use of heavy nupercaine simplifies the procedure.

We have successfully prevented post partum headaches by skin testing to nupercaine, ergotrate and pituitrin and omitting the agent to which a patient has proved sensitive.

In the event of sensitivity to nupercaine, the saddle block is not attempted.

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THE USE OF SULFAMYLON-STREPTOMYCIN MIXTURES IN THE PREVENTION AND TREATMENT OF LOCAL INFECTIONS

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Research chemists have, by altering the structural formula of sulfanilamide, produced sulfamylon: a synthetic homologue, which unlike the parent drug is non-toxic; acts in the presence of para-aminobenzoic acid, blood, tissue juices, and pus; and has a wide range of bactericidal activity against gram-positive micro-organisms. It is a stable, weakly acid, water soluble, white, crystalline compound, which, when combined in a five per cent aqueous solution with 200 units of streptomycin per cc, has a proven inhibitory and killing power for some 30 types of bacteria, including both gram-positive and gram-negative groups, as well as most of the aerobes and anaerobes, which for practical purposes comprise the entire bacterial spectrum. The mixture does not completely abolish the regrowth of highly resistant strains of bacillus pyocyaneus in cultures or wounds. It is, however, more effective than any other antibacterial agent.

EXPERIMENTAL INVESTIGATION

The irritating properties of sulfamylon hydrochloride and streptomycin sulphate were tested by instilling the mixture into the eyes of six rabbits which were treated at four hour intervals for 72 hours. There was a total absence of conjunctival redness and edema and lacrimation was only slightly increased. (2) Tissue reaction to sulfamylon-streptomycin solution was observed in eight rabbits. Shaved areas on the backs were cleansed with tincture of green soap and water and from five to 20 cc was injected through skin punctures deep into the lumbar muscles. Ninety-six hours later the animals were sacrificed and muscle specimens were examined histologically. In no instance did the tissues show inflammatory reaction or fibrosis. (3) Non-toxicity was demonstrated by intraperitoneal injections of 30 cc of the drug. Five rabbits showed no gross evidence of peritonitis 48 hours

after peritoneal puncture. Two animals received intravenous injections of 10 cc each without visible untoward systemic reactions, either immediate or delayed. (4) Fresh, unantiseptized, incised wounds in four rabbits infiltrated with sulfamylon-streptomycin mixture healed by primary intention. Incised contaminated wounds in three animals were treated by infiltration and wet dressings for ten minutes prior to suture. These wounds likewise healed without suppuration. (5) Crushed, contaminated wounds in eight rabbits treated with the sulfamylon-streptomycin combination and sutured within three hours after infliction healed by first intention. (6) Deep burns in three animals produced by live cautery, contaminated and left to granulate, became infected and suppurated. Completely debrided wounds in three controls treated by frequent topical applications of sulfamylon-streptomycin solution healed rapidly without further discharge of pus.

From this experimental data the following observations concerning the bactericidal properties of sulfamylon-streptomycin mixture were made: (1) It is non-irritating to mucous membranes and is locally and systemically non-toxic. (2) It produces a minimum of tissue reaction when injected directly into wounds by infiltration. (3) It kills all pyogenic bacteria within 10 minutes after local contact. (4) It acts in the presence of blood, pus, and tissue juices and promotes rapid healing in debrided wounds.

CLINICAL EVALUATION

More than 933 patients have been treated since 1947. Mixtures of sulfamylon hydrochloride five per cent and streptomycin sulphate 200 units per cc in aqueous suspension were identical with that used experimentally. The cases, according to location and duration of infection, were divided into eight groups. (1) Those with recent lacerations, burns, or abrasions less than three hours old. (2) Those with potentially or frankly infected wounds more than three hours old. (3) Those with chronic suppurating wounds. (4) Those with draining abscess cavities. (5) Those with acute sinusitis, rhinosinusitis, conjunctivitis, and otitis. (6) Those with cystitis, cervicitis, vaginitis and proctitis. (7) Those requiring preparation for skin grafting. (8) Those with generalized or localized peritonitis.

The antibacterial agent was (1) applied topically as wet dressings, (2) used as an irrigant, (3) injected subcutaneously into

traumatized tissues by infiltration, (4) instilled into the ears, eyes, and nose.

Lacerated wounds were cleansed with soap and water. Foreign bodies were removed and debridement performed whenever indicated. Deep wounds were irrigated with warm saline and wet dressings of sulfamylon-streptomycin mixture were applied for 10 minutes. The wound margins and base were then infiltrated with five to 10 cc of the solution after the use of a two per cent novocain local anesthetic. The wound edges were sutured snugly with #20 boiled cotton. In 346 consecutive cases where the trauma had been sustained and the wound treated in a period of less than three hours, there were no subsequent infections.

Wounds seen three to 24 hours after infliction were similarly treated but infiltration with the antibacterial drug was omitted because the infectious process already in progress would have been carried more deeply into the tissues. Attention was given to frequent saline irrigations followed at 30 minute intervals by the local application of dressings saturated with sulfamylon-streptomycin solution. Suturing of early infected wounds was delayed until they were clean and free from redness, discharge and swelling. The average time of delayed closure in 46 patients was 36 hours.

Chronic suppurating wounds such as occur in osteomyelitis were treated first by radical operative removal of the sequestrum. The open wound was then packed firmly with gauze, completely saturated with sulfamylon-streptomycin combination, held in place by strips of vasoline gauze and re-packed every eight hours.

Two cases showed rapid growth of healthy granulations and earlier-than-usual healing. Abscess cavities continuously irrigated with the antibacterial solution had a tendency to collapse and close early. Two cases of empyema, one in an adult complicating a penetrating knife wound of the chest healed in eight days after rib resection and closed tidal irrigation. The other, a child, with an empyema following a type I pneumonia, had full lung expansion in seven days using tidal sulfamylon-streptomycin irrigations by the closed method.

Subacute paranasal sinusitis was successfully treated in 52 patients. A solution of neosynephrin 1 per cent, and sulfamylon-streptomycin were introduced into the frontal and maxillary sinuses by the Proetz displacement technique. The average number

of daily treatments to effect complete relief was four.

Twenty-six cases of early otitis media were aborted when the external canal, on the involved side, was flooded daily for 10 minutes with the solution.

Thirty-six cases of acute conjunctivitis responded promptly to sulfamylon-streptomycin instillations when used by the patient at three hour intervals.

Twenty-six cases of recurrent cystitis, where organic pathology had been ruled out by previous cystoscopy and the colon bacillus found to be the offending organism, were treated by daily copious irrigations with normal saline and intravesicle instillation of sulfamylon-streptomycin mixture. The average case became asymptomatic in 72 hours.

Over 300 cases of endocervicitis with associated nonspecific vaginitis were treated by cauterization and conization of the cervix followed by wet packing of the vaginal vault and fornices with sulfamylon-streptomycin solution for a period of four days. The drainage, redness and pain rapidly disappeared.

Wet dressings of sulfamylon-streptomycin routinely applied to the perineum of 84 patients having under gone anorectal surgery, produced rapid healing and minimized the discomfort and tenesmus consequent to such procedures.

Wet sulfamylon-streptomycin dressings applied daily to the recipient site of burns proved ideal for ridding the wound of pyogenic micro-organisms and rendering its surface sterile for the reception of split thickness grafts. Eight patients who were skin grafted within 72 hours had perfect "takes".

One hundred cc of a sterile five per cent sulfamylon solution, representing five grams of the commercial drug, were poured into the peritoneal cavities of three patients from whom perforated gangrenous appendices (without free pus) had been removed and their abdomens closed without drainage. These patients suffered no systemic reaction whatsoever and were ambulatory as early as those who had undergone elective surgery. Two cases of duodenal perforation consequent to peptic ulceration, were

similarly treated and recovered uneventfully.

CONCLUSIONS

1. Sulfamylon five per cent is stable, non-toxic, nonirritating and highly effective against gram-positive bacteria. Its combination with streptomycin enhances the range of its antibacterial activity. The combined effectiveness against all pathogenic micro-organisms is almost 100 per cent.

2. Sulfamylon alone or in combination with streptomycin may be injected into tissues with impunity. No case yet reported has shown evidence of local tissue damage or destruction.

3. Sulfamylon or streptomycin either singularly or in combination kills bacteria on contact, acts in the presence of tissue juices, para-aminobenzoic acid, blood and pus. The only reason for debriding wounds is the removal of necrotic tissue which provides excellent nutrient media for bacterial growth and aids in the elimination of pus cells which contain live bacteria that in turn may be liberated to recontaminate the wounds.

4. Abundant experimental and clinical data have been presented in favor of sulfamylon and streptomycin as an excellent combined chemotherapeutic agent.

5. The combination of sulfamylon and streptomycin approaches the properties of an ideal antiseptic which will destroy bacteria freely, rapidly and totally without in turn traumatizing the tissue to which it is applied or exerting toxic effects on the host.

The sulfamylon and streptomycin solutions used in these experimental and clinical studies were generously supplied through the courtesy of Winthrop-Stearns Chemical Company.

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ROENTGEN RAY DIAGNOSIS OF PULMONARY METASTASES*

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Pulmonary metastases as a rule present no particular problem in diagnosis. In the nodular type they appear as round, moderately discrete densities, usually multiple and widely distributed. At other times they present an infiltrating linear streaked shadow fanning out from the hilus to the periphery of the lung. Often these metastases may be discovered on the roentgenogram long before any clinical symptoms develop. On the other hand the chest findings may give us the first clue that the patient is suffering from a malignant neoplasm.^{1 2 3 4 5}

Whereas most cases of pulmonary metastases can be easily identified by the expert eye, certain other cases present considerable difficulty even for him. Thus a single pulmonary metastasis cannot be definitely differentiated from a primary carcinoma of the lung. It may be necessary to resort to bronchoscopy or examination of bronchial cellular secretions and in a smaller percentage of cases thoracotomy and microscopic examination of tissue before a diagnosis can be established. Recently we encountered just such a case, an elderly male patient who was admitted into the hospital because of a suspected intracranial tumor. This impression was confirmed on the plain films of the skull which showed considerable displacement of the calcified pineal body. The chest film showed a single nodular lesion of increased density of the lung. Bronchoscopic examination was done and gave no additional information as to the nature of this lesion. At necropsy a bronchogenic carcinoma was found with metastasis to the brain. (Fig. 1A).

Septic pneumonia, also referred to as focal or metastatic pneumonia resulting from a septicemia will produce multiple nodular infiltrations in both lung fields, which may be misinterpreted without any knowledge of the history or other facts concerning the case. Resolution of these pulmonary nodules

or formation of multiple small abscesses on subsequent examinations would help to rule out malignant metastases.

Tuberculomas and nodular hyperplastic tuberculosis may closely simulate pulmonary metastases. Several such cases have come to my attention which have been picked up on mass chest survey studies, which have been a source of considerable worry both to the examiner as well as the patient. These people often require a most thorough examination before a diagnosis can be ventured with any degree of certainty. (Fig. 1B and 1C).

Sarcoidosis may often exist in the chest without producing any alarming respiratory symptoms. Extensive roentgen changes, out of proportion to the symptoms are characteristic of this disease. Confirmation of the diagnosis by microscopic examination of skin lesions or enlarged superficial lymph nodes is desirable when possible. Bilateral and symmetrical enlarged hilar lymph nodes with nodular and streaked infiltration should suggest the possibility of a Boeck's sarcoid when present. (Fig. 2A).

Any fungus infection and coccidiomycosis in particular may produce single or multiple nodular lesions which may be confused with metastases. History of residence or exposure in one of the endemic areas in California or Texas, where this disease is prevalent should make one seriously think of this possibility. (Fig. 2B).

Diffuse carcinomatosis, miliary tuberculosis and silicosis may look so much alike in a chest film that differentiation by this method alone may be impossible. With a history of long exposure to silica dust or knowledge that the patient has a malignant neoplasm would cast considerable weight on the interpretation of the pulmonary findings as seen on the roentgenograms. (Fig. 2C).

The question arises whether the incidence of pulmonary metastases has increased in recent years. It would be extremely difficult to either prove or disprove this point. Perhaps we see or discover more cases of pul-

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Fig. 1A Primary carcinoma of the lung which may be mistaken for metastatic lesion.

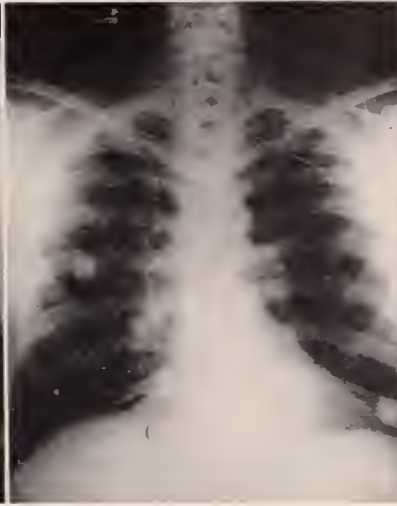


Fig. 1B Tuberculoma of the lung.



Fig. 1C Hyperplastic nodular type of pulmonary tuberculosis.

monary metastases because of several reasons; such as routine chest films taken of all hospital patients, mass chest survey studies; interval chest films taken on all patients who are known to have a malignant disease or have received treatment for it. Perhaps the more radical approach and more thorough attempt to eradicate the primary lesion, thereby giving the patient a better chance to become a five year survival and at the same time giving also a better opportunity to develop pulmonary metastases. Conversely it has been stated by others and confirmed by our own observation, that inadequate removal or improper handling of a malignant disease, may result in rapid dissemination

of the disease throughout the entire body; this spread can be best visualized in the lung fields. Recently we saw a patient with a tremendous mixed tumor of the parotid which was of 16 years duration and had grown to a size slightly larger than a man's head. In the last six months an ulceration of the skin developed and a biopsy taken from this area was reported as squamous cell carcinoma. The entire tumor was widely excised. Within three weeks following this procedure pulmonary metastases developed and the patient died shortly thereafter. It is rather unusual to see pulmonary metastases in cases of carcinoma of the penis which metastasize by way of the lymphatics and

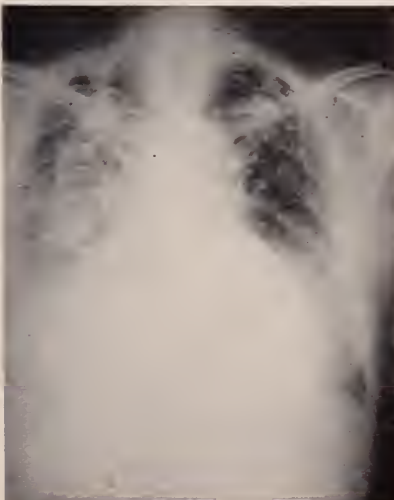


Fig. 2A Coccidiomycosis — This patient also had subcutaneous nodules with pulmonary finding.

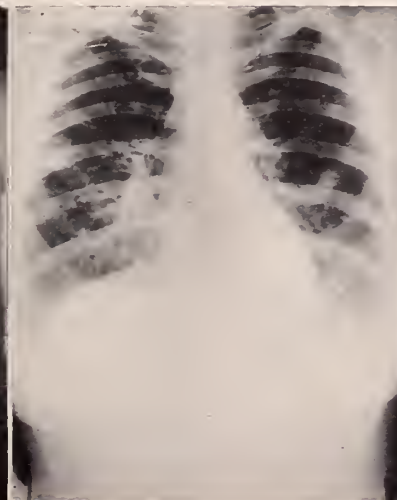


Fig. 2B Sarcoidosis — enlarged hilar shadows with streaked areas of infiltration.



Fig. 2C Silicosis — nodular type of pulmonary fibrosis.

by direct extension. In a patient who was treated inadequately by a circumcision because a lesion on the prepuce was not considered to be malignant, shortly thereafter, not only had extensive metastases to the inguinal and iliac lymph nodes, but also very extensive pulmonary involvement.

In my own experience, there is only one type of pulmonary metastases that I can identify with any degree of certainty the primary site of the disease. These are cases of carcinoma of the prostate which in addition to the pulmonary lesions have the

In a recent analysis of 60 cases of pulmonary metastases studied at University Hospitals — revealed.

The above table makes it quite evident that almost any type of metastases may develop in the lungs, which provide these cell implants with an ideal site for nidation and development.

SUMMARY

Pulmonary metastases are often easy to diagnose and at other times have to be differentiated from primary cancer of the lung, focal pneumonia, tuberculosis, sarcoi-

PULMONARY METASTASES 60 CASES

Sex M 30 — F 30

Age 18 to 72 years — average age 49 years.

Primary neoplasm located in:

G. U. tract 27 cases—Breast 13, kidney 4, testis 4, cervix 3, prostate 1, penis 1, chorio-epithelioma 1.

G. I. tract 5 cases—Esophagus 2, stomach 1, rectum 2.

Resp. tract 5 cases—Tonsil 1, pharynx 1, lung 3.

Lymphoblastoma 7 cases—Hodgkin's 5, lymphoblastoma 2.

Misc. 11 cases—Melanoma 3, thyroid 2, soft tissue sarcoma 2, skin 1, parotid 1, bone 1, synovioma 1.

Primary site unknown 5 cases.

telltale eburnation and osteoplastic involvement of the bony thorax. Otherwise, in many other cases, by taking into consideration the age, sex and race of the individual one may choose the most likely possibility. Young children with pulmonary metastases should bring to mind the possibilities of neuroblastoma, Wilm's tumor and leukemia. In the adolescent group, bone tumors may be suspected whereas in an older age group, Hodgkin's disease, lymphosarcoma, testicular tumors and malignant melanoma are by far more common. In the adult and aged female, cancers of the breast and uterus are always likely possibilities whereas in men of the same age group, cancer of the stomach, lung, kidney and colon are more frequently encountered.

dosis, fungus infection and silicosis.

We probably see more cases of pulmonary metastases today than formerly probably because of the more wide use of the chest x-ray.

Pulmonary metastases per se seldom give us the information as to where the primary site of the malignancy is located.

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CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Surgery*

HOWARD C. HOPPS, M.D., AND FRED A. QUENZER, M.D.

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DOCTOR HOPPS: This interesting diagnostic problem will be discussed by Dr. Quenzer. His information of this case is limited to that which each of you have received in mimeographed form.

PROTOCOL

Patient: G. M. S., 34 year old white male.

Chief Complaints: (1) Epigastric pain, (2) Nausea and vomiting.

Present Illness: The patient had numerous complaints and gave a very voluminous and more or less disconnected history. He dated the onset of his illness to 12 years before admission. At that time he had an appendectomy and shortly after recovery he began to have repeated episodes of gnawing epigastric pain. Characteristically the pain would occur shortly before meals and frequently would awaken him at night. Relief was obtained by taking food or antacids. For eight or nine years he consulted numerous physicians; each told him that he had a peptic ulcer. Each placed him on a diet and gave him several oral medications which would give partial relief. He moved from town to town quite frequently, however, and did not adhere long to any regime of treatment. In addition, he was constantly plagued by constipation and could not obtain a bowel movement unless he took a laxative. These complaints kept him in a constant state of nervousness and in a "run down condition". Nevertheless he managed to carry on a gainful occupation as an oil field rigger. In 1943, he was called up for the draft; a G. I. series at that time was negative. He was deferred "because of an essential occupation". The symptoms continued with very little change until about one year before admission. At that time he "sprained" his back and was forced to quit

working. Then, gradually, his epigastric pain became more severe and began to radiate into the right groin and occasionally to the right costovertebral angle. He began to have frequent episodes of post-prandial nausea which were sometimes followed by vomiting of recently eaten food. About the same time he started having burning on urination and experienced difficulty in starting the stream. Quite often the urine was cloudy but never contained gross blood. He began to have severe generalized headaches. Approximately six months before admission the patient first developed transient pains in many of his joints. This was not accompanied by redness or swelling of affected parts. As time went along, all complaints increased in frequency and intensity. The patient became extremely irritable and had marked anorexia, which symptom he related to frequent episodes of vomiting. Occasionally the vomitus contained bright red blood and on direct questioning, the patient admitted that it had contained coffee-grounds material "a few times". About one month before admission his condition became such that he was forced to remain in bed most of the time. During this month he had several chills, but he never measured his temperature. One week before admission, a G. I. series was performed by his local physician who told him that it was negative and that his difficulties were due to "nerves". He consulted another doctor who urged hospitalization. The patient stated that over the past year he had lost some weight, how much he did not know. He denied jaundice, specific food aversions, melena and recent change in bowel habits.

Past History: He had a hemorrhoidectomy seven years previously. He had used alcohol

to excess and sometimes "too often". He spent one month in California six months before admission.

Family History: Non-contributory.

Physical Examination: T. 98.6°F.; P. 100; R. 28; BP 130/90. The patient was well developed, fairly well nourished and alert. He was "groaning with each respiration but seems to be overemphasizing his pain". The right pupil was larger than the left; only the right reacted to light and accommodation. There was a small, subcutaneous nodule, 1 cm. in diameter, in the sub-mental region of the neck. The heart and lungs were within normal limits. The abdomen was slightly distended, and there was generalized abdominal tenderness to deep pressure, most marked in upper portions. Rebound tenderness or muscle spasm were not elicited. The abdomen was tympanitic to percussion; there were no signs of fluid. No masses or viscera could be palpated. Rectal examination was negative. Bilateral CVA pain was produced by percussion (fist) over the spine. All deep reflexes were slightly hyperactive. Romberg and Babinski signs could not be elicited.

Laboratory Data: Repeated examinations of the urine failed to reveal any abnormality. On admission hemoglobin was 13 gm. per cent; RBC's 4,150,000/cu.mm.; WBC's 17,100/cu.mm. with 83 per cent neutrophils (5 per cent stabs), 12 per cent lymphocytes and 5 per cent monocytes. Four days later a repeated count was similar except that leukocytes had decreased to 10,300/cu.mm. The fasting blood sugar was 65 mgm. per cent. Serum amylase determinations on successive days were 96 and 94 mgm. 100 cc. One determination of the icteric index was 19. A cephalin flocculation test was 2+ at 24 hours and 4+ at 48 hours. The blood Mazzini was negative. Examination of the spinal fluid revealed: 20 mgm. per cent protein, negative globulin, 71 mgm. per cent sugar, no cells, negative Wasserman and negative colloidal gold curve. After an Ewald meal the gastric contents contained 55° total acid, no free acid, no bile and a trace reaction for blood. A flat film of the abdomen showed "dilated loops of small intestine suggesting a possibility of partial intestinal obstruction". An upright film of the abdomen failed to reveal air under the diaphragm. On a KUB film the right psoas shadow was not visualized "suggesting the possibility of the presence of fluid". On the same film "numerous small faint areas of

increased density scattered throughout the bony pelvis" were seen and the impression was "osteopoikilosis; however, the possibility of bony metastases should also be considered".

Clinical Course: He was treated symptomatically. A Miller-Abbott tube was passed and Wangensteen suction started. Despite this, the patient's distention increased somewhat. His temperature was irregular and varied from 97.2° to 100.6° (R). His abdominal pain was lessened by A.S.A. compound and phenobarbital. On the fifth hospital day an upper G.I. series was performed and reported; "no pathology of the esophagus. The part of the stomach that is visualized is small. We were unable to fill the antrum or visualize the duodenal cap. After three hours there is 100 per cent retention. Impression: complete pyloric obstruction, unable to determine cause of obstruction." On the sixth day an exploratory laparotomy was performed. The patient expired on the eighth postoperative day.

CLINICAL DIAGNOSIS

DOCTOR QUENZER: This patient was 34 years old; he had epigastric pain, nausea and vomiting along with a 12 year history of epigastric pain, occurring before meals, awakening him at night, relieved by food or antacids. For a period of eight or nine years doctors told him he probably had a peptic ulcer and I'm inclined to agree with them that the most likely working diagnosis was *peptic ulcer*. Failure to completely respond to treatment may have been because of the patient's inability to follow treatment, or simply because he didn't care to. The excessive use of alcohol may have been a factor too in accounting for the frequent recurrences of symptoms. The report of a negative G.I. series in 1943 does not exclude the possibility that he may have had repeated episodes of peptic ulcer for a good many years. The description of pain on an empty stomach, often occurring at night, relieved by food, suggests duodenal location of the peptic ulcer. In gastric ulcer, pain usually occurs on a full stomach and the pain which occurs after eating is relieved by vomiting. Symptoms of this type are described as having occurred within the year prior to this patient's admission to the hospital. The epigastric pain evidently didn't change much in character, or at least the historian did not record any changes in character, but I am presuming that this patient may have developed a gastric ulcer after many years of

duodenal ulcer, and that this is the basis for the occurrence of postprandial nausea and vomiting. Peptic ulcer can thus account for many years of the patient's illness. There was little change in symptomatology until about a year prior to his admission to the hospital. The "sprained back" that forced him to quit work may have been from an injury he received on his job and be entirely incidental to the major disease process. This burning on urination and difficulty in starting the stream is something I find difficult to interpret. In a migratory oil field worker, 34 years of age, it is entirely possible that he developed a venereal infection which has nothing to do with the present situation. I can not explain the generalized severe headaches as an effect of peptic ulcer. During the months prior to admission the patient had several chills but did not measure his temperature. Here, one very much desires more specific information. The fact that the patient did not take his temperature makes all the more important his subjective evaluation of the signs and symptoms of fever — did he feel hot, perspire, have malaise, etc.?

A week before admission a G.I. series was performed and reported to the patient as negative. That is not at all inconsistent with the presence of a gastric peptic ulcer. Gastric ulcers are notoriously difficult to find on x-ray and unless numerous exposures are taken at different times they may easily be missed. The negative G.I. series, while it minimizes the possibility of scarring with pyloric obstruction from his old duodenal ulcer, does not exclude the possibility of an active gastric ulcer. The fact that he vomited blood would fit in with peptic ulcer, but of course could also be caused by esophageal varices or a variety of other lesions in the upper gastro-intestinal tract. The history of alcoholism focuses additional attention upon the possibility of esophageal varicosities as a manifestation of cirrhosis of the liver, although we know of course that cirrhosis may occur in non-alcoholics and, conversely, some of our "best" alcoholics do not develop this disease.

Upon physical examination the patient was fairly well nourished and well developed. That does not speak for a great weight loss. The history says that the patient thought he had lost some weight, the exact amount is not known. It would be much more helpful to us to know what the average weight was and then compare it with the hospital weight. The right pupil was larger

than the left. Here again the description is insufficient; was the right one dilated, or was the left one contracted? If the left one was contracted he might possibly have had sympathetic interruption on the left side. If the right one was dilated he might have had sympathetic irritation on this side. I can not interpret the fact that the left pupil did not react to light and accommodation. In CNS lues the pupils do not react to light, but do to accommodation. A blind eye will not react to light if light is thrown into the blind eye, but it will react if light is thrown into the good eye, consensual reaction. A small subcutaneous nodule, 1 cm. in diameter, in the sub-mental region is noted. This gives size and location, but not consistency or degree of fixation. Was it a sebaceous cyst attached to the skin? Was it thought to be a lymph node? We can not tell, and yet it might be of great significance. It says here that the heart and lungs were within normal limits to physical examination. I should like to see a roentgenogram of the chest. The abdomen was slightly distended and there was generalized tenderness, mostly in the upper abdomen. This doesn't help us much except that we know no masses were palpated. This excludes a large tumor mass, but of course an abdominal tumor may be present and not be palpated.

Laboratory data contributes little. The leukocytosis indicates a possible inflammatory lesion somewhere, or perhaps dehydration may have been responsible. At any rate, four days later the white count had dropped. The blood sugar is a low normal; the serum amylase is normal. Icteric index was 19, about the level of clinical jaundice. The cephalin flocculation test indicates liver damage. These could fit in with cirrhosis of the liver. A moment ago we discussed the possibility that this man may have had a venereal disease; the lymphadenopathy, fleeting joint pains, abdominal pain, irregularity of pupils and the headache could come from a luetic infection, but this would seem to be pretty well ruled out by the negative blood and spinal fluid Wasserman's.

A flat plate of the abdomen showed dilated loops of small intestine and this suggests partial intestinal obstruction. So far we've been operating on the assumption that this patient had peptic ulcer, intermittently active for years. Then his symptoms changed. Now he probably has something different. Uncomplicated peptic ulcer should not give intestinal obstruction. There is a possibility that one of the more severe epi-

sodes may have lead to perforation of the peptic ulcer with resultant peritonitis, subphrenic abscess, hepatitis — giving him the abnormal liver function test and adhesions — giving rise to intestinal obstruction. The history does not provide strong evidence for this sequence of events but it must be considered. There is no free air in the diaphragm, that means that he does not have a recent perforation of a hollow viscus from which air has escaped. Now, another question that was brought was that of osteopoikilosis. This simply means that the bone was not of homogeneous density. These areas of varying radio-opacity are consistent with a number of things, one of them being metastatic carcinoma. Metastatic carcinoma most commonly produces osteolytic lesions except in the case of carcinoma of prostate which characteristically produces osteogenic bone metastases. I don't believe that the bony changes are sufficiently marked for us to seriously consider them as metastatic lesions. A G.I. series was reported as no pathology of the esophagus. The stomach visualization was unsatisfactory, from a diagnostic standpoint at least. He had 100 per cent retention of barium, apparently from complete pyloric obstruction. This is about the extent of information available at the time the patient was operated upon. I don't know whether the correct diagnosis was made preoperatively or not. I don't know whether he was explored as part of the diagnostic procedure or whether it was intended to correct the intestinal obstruction. There is no statement in history of presence or absence of peristalsis or hyper-peristalsis, what the bowel sounds were, whether or not there was intestinal colic and cramps, whether or not he had a flat, silent abdomen, etc. This would be very helpful information, but we just don't have it.

In summarizing the diagnostic possibilities here, I think all of us will concede that this patient has a history typical of duodenal peptic ulcer. Did he subsequently develop a gastric ulcer? Perhaps. He had hematemesis, a change in character of pain, and he developed pyloric obstruction. He may have had a perforation, but that is not too common. There are several other possibilities to consider and one of these is *carcinoma of the stomach*. Some consider that peptic ulcer undergoes malignant change in a certain percentage of cases. I personally feel that if a carcinoma of the stomach develops in a patient with peptic ulcer it is coincidental; it means that he has developed a carcinoma

in spite of the fact that he previously had an ulcer. Many of this patient's complaints could be explained on this basis — carcinoma of the stomach with metastasis to the liver. Hepatic function tests are not usually affected in metastatic carcinoma from the stomach, however. Perhaps 85 or 90 per cent of the liver may be replaced by metastatic carcinoma without any change in liver function tests. We have only two tests available here, the icteric index and the cephalin flocculation. Another disease which could very well account for all of the patient's symptoms — his malaise, his change in character of pain, his rather widespread symptomatology — could be lymphoblastoma. Hodgkin's disease with abdominal nodes can give anorexia, postprandial distress, vomiting and headaches. Mediastinal nodes pressing on the sympathetic nerves can produce irregularity of pupils, although probably not as described here. Usually under these conditions the patient develops Horner's syndrome — a contracted pupil, enophthalmus and a narrowing of the palpebral fissure on the affected side along with the loss of sweating on that side. The patient may have diffuse Hodgkin's infiltration in the liver along with other intra-abdominal lesions and may possibly have had Hodgkin's infiltration in the bone to give the picture of osteopoikilosis. If that is the case it is rather unusual.

CLINICAL DISCUSSION

QUESTION: Is Hodgkin's disease the only lymphoblastoma you considered?

DOCTOR QUENZER: I mention Hodgkin's disease as one example of lymphoblastoma. The patient might have lymphosarcoma — any of those may be a possibility; they can not be differentiated clinically, especially when we don't have a biopsy specimen to examine.

QUESTION: What is the significance of the low blood sugar?

DOCTOR QUENZER: The low blood sugar is consistent with hepatic disease, but of no specific diagnostic value.

QUESTION: If the patient had not eaten for 24 to 36 hours could not this alone explain the hypoglycemia?

DOCTOR QUENZER: The normal blood sugar is not a fixed number, we give the normal range as being from 80 to 120, most normals are in that range. Some normals can be as low as 60, some a little higher than 120. I didn't put much significance to that 65 mg. per cent reading because it is not supported by repeated determinations or

glucose tolerance tests, and I don't think this single determination is low enough to be of much significance. None of the symptoms of which he complained are characteristic of a hypoglycemic reaction. He didn't have tremors, sweats, possible mental aberration, etc.

QUESTION: What about carcinoma of the prostate as the major diagnosis?

DOCTOR QUENZER: If this man had two or three diseases, a remote possibility is that the symptoms of dysuria and frequency followed a carcinoma of the prostate with metastases in the pelvis. In a 34 year old white male that is relatively uncommon, and the physical examination states that the rectal examination was negative. If he had a sufficiently large carcinoma of the prostate to give obstructive symptoms plus metastases, the rectal examination should not have been negative.

DOCTOR HOPPS: Dr. Cavanaugh, could you elucidate any more about the changes in the bone marrow? Do you think that they could represent a metastatic lesion? Is it possible that they represent gas-filled loops of intestine?

DOCTOR CAVANAUGH: I believe that these changes represent true bony lesions. We can't say whether or not they represent metastases.

DOCTOR HOPPS: In your differential diagnosis Dr. Quenzer you favored first, malignant neoplasm of the stomach. You mentioned both lymphoblastoma and carcinoma. Which do you think most likely?

DOCTOR QUENZER: I consider carcinoma of the stomach the most likely diagnosis.

ANATOMIC DIAGNOSIS

This man had an exploratory laparotomy and it was just that. He died eight days later. At the time of death, in addition to the nodule which was described in the record as being sub-mental, and which was considered at autopsy as probably an epidermal cyst, there were two other nodules, each 0.3 cm. in diameter, one in the right frontal region right at the hairline and one beneath the right eyelid. It was thought that these might well represent metastatic neoplasm. These were not mentioned in the patient's chart and might have developed terminally. The man was fairly well nourished and fairly well developed, but from our subsequent observations it appears he may have suffered from acute starvation. Each pleural cavity contained approximately 500 cc. of serous fluid of low specific gravity; the pericardial cavity had a moderately increased

amount of fluid — a thing we often see in nutritional edema. The heart was not remarkable. The lungs were of approximately normal size, the left weighed 280 gm. and the right 330 gm.; there was no pulmonary edema or pneumonia. The peribronchial and paratracheal lymph nodes were moderately enlarged and many of them appeared to be replaced by neoplastic tissue in that they were much firmer than usual and grayish-pink. Careful inspection of the lungs and bronchial tree did not reveal any gross evidence of neoplastic involvement. The nodes in the anterior mediastinum were all affected in a manner similar to that just described. The abdomen presented a transverse incisional wound which was approximately eight days old and which appeared to be healing well. Upon opening the peritoneal cavity a rather dramatic change was observed; the omentum had been converted into a discoid mass of indurated tissue 23x20" in diameter averaging 3 cm. in thickness. It was quite firm, indurated and had the appearance of being almost completely replaced by neoplastic tissue. It was not bound down to the underlying viscera. The parietal and visceral peritoneum, including surfaces of all intestines, were studded with nodules of pinkish-white tissue up to 0.6 cm. in diameter, the picture of peritoneal carcinomatosis. The cavity contained approximately 1500 cc. of a pink opalescent fluid which had a specific gravity of 1.010. The spleen was not remarkable. The liver was interesting because of the evidence of abnormal hepatic function described in the history. It was slightly increased in weight and when cut surfaces were scraped fine droplets of lipid could be seen. The cut surfaces bulged somewhat also, so that there was fatty change along with parenchymatous degeneration. These changes are quite compatible with acute starvation, and as you know, in the first few weeks of acute starvation there is a good deal of fat mobilized which, for a time, is stored in the liver so that fatty change is characteristic of the early stages of starvation. I think that such a simple process as acute starvation may account for the reported abnormalities in hepatic function.

The most interesting changes were in the stomach. In the pre-pyloric region, along the lesser curvature there was an ulcerative lesion approximately 3 cm. in diameter. The edges of this ulcer were considerably elevated, rolled, indurated and quite thickened. Spreading out from this central area of ul-

ceration the wall of the stomach was markedly thickened and indurated, to the extent that the complete pyloric region was involved. The stomach wall was thickened up to 2 cm. It was this thickening and induration that was responsible for the high degree of obstruction seen in the film. The histologic sections dramatically show the true nature of this lesion to be an infiltrating mucinous carcinoma. Peribronchial and tracheal lymph nodes, para-aortic nodes, the omental mass and the peritoneal nodules present a similar type of neoplasm.

Our final anatomic diagnosis was:

1. Carcinoma of stomach, ulcerative and infiltrating, of lesser curvature causing partial pyloric obstruction, with metastases to regional lymph nodes, omentum (massive), para-aortic and iliac lymph nodes, peritoneum (peritoneal carcinomatosis), mesentery of small intestine, peribronchial and paratracheal lymph nodes, lymph nodes of the anterior mediastinum and lung (lymphocytic)
2. Post-operative state following exploratory laparotomy (eight days)
3. Ascites, hydrothorax, bilateral and hydropericardium
4. Fatty change and parenchymatous degeneration of liver

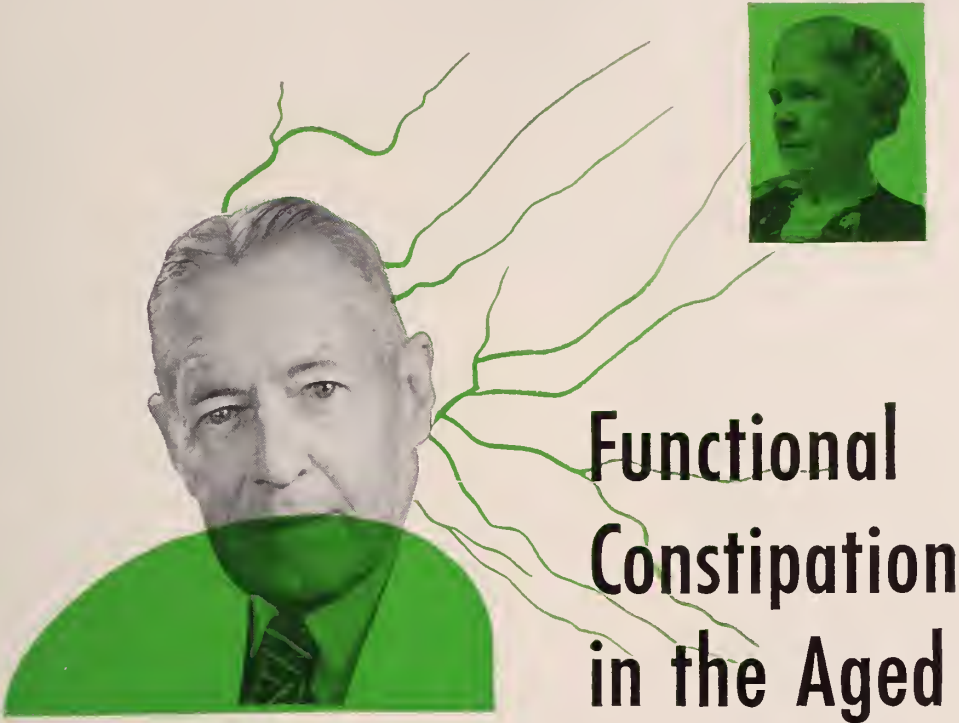
We weren't allowed to examine the brain so we don't know the basis for some of the changes which may have emanated from there. In view of lack of any evidence of metastasis to the bones, or blood borne metastasis in any organ, it is unlikely that there was metastasis there. In relation to the possible pre-existence of peptic ulcer, any previous *gastric* ulcer in the pyloric area would have been obscured by this neoplastic process. There was no evidence of recent or old duodenal ulcer and this was carefully looked for.

DISCUSSION

DOCTOR QUENZER: The lack of evidence of previous duodenal ulcer is, in one sense, disappointing, because that is the one thing upon which I would have based his 12 year history. He did not have this carcinoma of the stomach for 12 years. This is of recent origin, probably not over a year or year and a half duration. The findings of peritoneal carcinomatosis, involvement of the omentum, etc., brings up the point that careful digital rectal examination will reveal a good many cases of peritoneal metastases on the basis of palpating drop metastases to the rectal shelf. On digital rectal examination, just above the level of the prostate, sometimes one can feel a transverse indurated nodular ridge which is in my mind an indication of inoperability of a carcinoma of the stomach. It is not an infallible sign, however because of the considerable individual anatomical variation in the level of peritoneal reflexion; sometimes the peritoneal reflexion is as high as 12 or 14 cm. above the anal margin and there are very few fingers long enough to reach this far.

QUESTION: Isn't it very unusual for a patient with carcinoma of the stomach to be this well nourished?

DOCTOR QUENZER: Actually, a patient can have carcinoma of the stomach and be in excellent physical appearance. In fact, most patients with carcinoma of the stomach are in excellent health until the carcinoma gets big enough to really affect them. Our difficulty is that while the patient is still in excellent health it is almost impossible to make a diagnosis of carcinoma. In a man with as extensive a spread as this man had, one would not have expected him to appear in relatively good health, and yet, none of the vital organs were involved to any significant degree; he had no extensive pulmonary metastasis and his liver was not grossly involved. There was no interference with vital function until the carcinoma finally obstructed the gastric outlet and this occurred only a few weeks before death.



"Constipation is very frequently found in people of climacteric age,.... In the vast majority of patients, constipation is probably due to improper habits, diet, or gastrointestinal disorders."*

The soft, demulcent, water-retaining, mucilloid bulk provided by Metamucil gently initiates reestablishment of reflex peristalsis and movement of the intestinal contents.

G. D. Searle & Co., Chicago 80, Illinois.

*Werner, A. A.: The Climacteric in Women and Men, Postgrad. Med. 4:102 (Aug.) 1948.



METAMUCIL® is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent.

RESEARCH IN THE SERVICE OF MEDICINE

SEARLE

President's Page

It is a strange feeling that comes over one when a Department of Justice agent presents a letter from the Assistant Attorney General of the U.S. directing an investigation into the records and activities of an organization such as ours — for “possible alleged violation of the anti-trust laws in the field of medicine”.

Though we were not informed as to what specific information the Government sought, your officers and Council cooperated voluntarily, confident your Association was not at fault.

A release in the A.M.A. Secretary's Letter October 24, states that the U.S. Attorney General, “Told the press that the Justice Department wanted to know if any monopoly existed in connection with prepaid medical care plans”. The investigation here however, though carried out in a very orderly and gentlemanly manner, was most thorough, covering the organizational set up, membership, minutes of Council and committee meetings, correspondence and other records of the Association, terminating with a two hour question period with the Executive Secretary, the President and legal counsel.

One cannot but wonder about the motives back of such an inquiry when we consider:

1. The letter directing the investigation was dated August 25, 1949, 10 days after defeat of President Truman's Reorganization Plan No. 1 which your Medical Association opposed.

2. Most of the states actively opposing the Reorganization Plan No. 1 were in the first list of those under investigation.

3. Mr. J. Howard McGrath, Attorney General of the U.S., was former chairman of the Democratic National Committee and co-sponsor in the Senate of the Administration's compulsory health insurance bill.

What do others think of this investigation?

1. *Cleveland Plain Dealer*, October 8, under heading entitled “The Police State” says, “It happens, however, that the American Medical Association is conducting a nation-wide campaign against President Truman's compulsory health insurance program. In a police state, when anybody opposes the government, the police move in and cart the objectors off to jail.”

2. *Columbus Evening Dispatch*, October 7, “Shocking Abuse,” “Action of the anti-trust division of the U.S. Department of Justice in ‘investigating’ county and state medical societies affiliated with the American Medical Association is a shocking mis-use of federal authority. . . The reason behind this obviously political persecution of one of the nation's most respected professional groups is childish transparent. The AMA has vigorously opposed President Truman's state medicine proposal. Therefore, the doctors are to be put on the spot.”

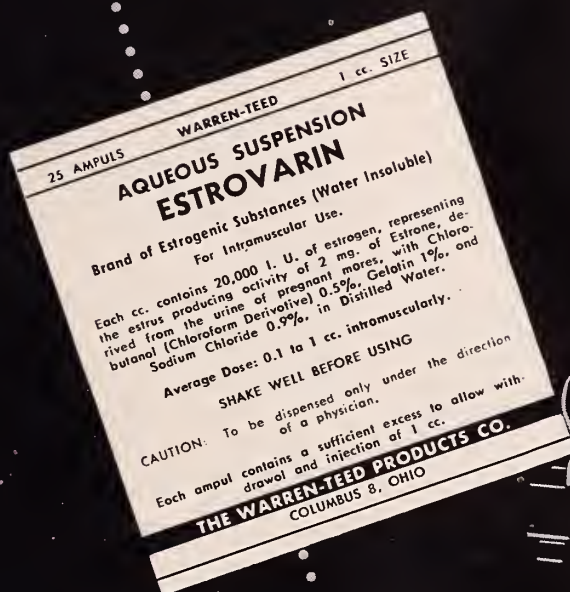
3. *Chicago Daily Tribune*, October 11, “Who's a Monopolist?”, “Lewis and Murray cannot be charged with monopolistic practices because unions are exempt from prosecution under the anti-trust laws. If the members of the AMA were organized in a labor union and affiliated with the AFL or CIO they could run out of business all prepaid medical care plans which did not pay tribute to the AMA.”

4. *The Wall Street Journal*, October 10, “. . . the A.M.A. is on unquestionable grounds when it says the administration's health health scheme ‘would be a government monopoly to which every citizen would be compelled to contribute.’ In other words, the same administration whose trust-busters charge the medical societies with monopoly wants to create an absolute and unbustable medical monopoly.”

Think on this situation. Where are we going as a nation?

George H. Garrison
President.

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Special Article

OSLER THE MAN*

LEWIS J. MOORMAN, M.D.

OKLAHOMA CITY, OKLAHOMA

Without taking time adequately to acknowledge the unmerited honor this occasion confers upon me, I hasten to say that one hundred years ago on one of your far flung frontiers a strange, intangible force came into being. It was a highly potential, creative, acquisitive, vitalizing, scintillating, contagious force; it was called William Osler; it became Osler the Man and ultimately the medical mentor for all mankind.

Though never having had the privilege of personal contact with Sir William Osler, through his writings, his pupils, his patients, his relatives and friends, I have achieved a spiritual intimacy with him which continues to grow.

When Mrs. Moorman and I were in London in 1909, I carried a letter of introduction from his student and admirer, Dr. Henry A. Christian of Harvard, but an emergency clipped our plans and opportunity passed forever.

I am proud to stand here as a representative of my country, one of the three in which Osler lived and worked and moved toward world wide influence and acclaim. Fortunately, the citizenry of these three countries, sharing a possessive interest were fused in the same crucible, speak the same language and live and die by the same ideals which reached a high tide in Sir William Osler,—the Man.

Having been a doctor on horseback in a log cabin community, a horse and buggy doctor on the unchartered plains and finally a city practitioner where ultimately I walked the wards with colleagues and students I can claim a comprehensive appreciation of what Osler has meant to the American physician in all walks of life.

My association with Osler through the channels I have mentioned, was unusually close because it came through the gift of loneliness.

It began with the third edition of the *Principles and Practice of Medicine* in 1899. This textbook well launched on its remarkable career turned the century with me, set the pattern for my country practice and remained my chief council and companion; it introduced me to Hippocrates and Plato and stirred strange new aspirations which were fanned in to flame by his successive historical and cultural writings.

It was Osler who rode with me on the lonely trails and accompanied me into the cabin, the dugout, the sod house and the windswept prairie shack. It was he who sat with me at the bedside in attendance upon the sick. It was he who followed me to the city and became my mentor as physician, philosopher and teacher. It was he who taught me to exercise the heart equally with the head and to treat the purse as a secondary consideration.

It was he who gave me "The Leaven of Science", "The Master Word", "Unity, Peace, and Concord, A Way of Life", and finally, "Equanimatas". It was Osler, the Man, who taught me to strive for something above the common level.

While conveying the art and science of medicine to his pupils he was giving comfort, health and life to his patients and yet he was living in the mystic realm "of the shadowland" always on guard for "Glimpses that might make us less forlorn". He knew that "the hopes and fears which make us men are inseparable" and bravely he trod the "wine press of doubt" that others might not be afraid. The things that created Osler, the Man, became the criteria for the young who came under his power and experienced his love of youth.

*Presented before The Osler Club at the Royal College of Surgeons, London, July 12, 1949, commemorating Sir William Osler's hundredth birthday.

**Publication of this article is by request of the Editorial Board and not the Editor and author of the article.

In a recent meeting of the American Association of the History of Medicine at a great dinner session devoted to the theme we now pursue, I heard some of these one-time young men tell of this love. I had the honor of sitting with Mrs. Abbott, Sir William's niece, the cousin of W. H. Francis who last read to him and forged the final link between the man and his books and suggested this valedictory, "He prayeth best who loveth best all things both great and small." In addition to Mrs. Abbott's gracious response to the President's invitation, I was favored with intimate flashes from her memory. One of these is sufficient partially to explain Osler's intellectual ascendancy. At a gay informal dinner party he whispered in her ear, "Please excuse me, I have an appointment with Plato."

His facility for friendship, his personal charm, his magnetic appeal, his spontaneous mirth, his unmatched erudition, his artless exhibition of rare gifts and his unbounded generosity captivated all who came. Unlike

Atlas, he never stooped to shoulder the world, but always kept his arms around it.

According to his own record he left Canada rich in the goods "which neither rust nor moth have been able to corrupt".

He left America saying truly:

"I have loved no darkness
sophisticated no truth,
nursed no delusion,
allowed no fear."

He left England with the last verses of "The Ancient Mariner" in his mind and a simple, affectionate "nighty-night" on his tongue. No doubt he had an appointment with the Master, perhaps with Plato, Thomas Brown, Robert Burton, Francis Adams, John Locke or Sydenham and not irreverently, we can imagine him whispering to one of these, "Excuse me, I have an appointment with Isaac Walton Junior (his son, Revere, killed in World War I) where enchanting trout streams flow in rhythmic beauty through Elysian Fields."

Graduate And Postgraduate Medicine

**COURSE IN THE SCIENCES FUNDAMENTAL TO
MEDICAL AND SURGICAL SPECIALTIES AT
UNIVERSITY OF COLORADO MEDICAL SCHOOL
Denver, Colorado**

Winter Quarter — January 3 to March 18, 1950

Spring Quarter — March 27 to June 10, 1950

These courses are designed to orient the graduate student in the basic sciences required for certification by the various American Specialty Boards, except Otolaryngology and Ophthalmology. Attendance on a full-time or part-time basis may be arranged according to individual needs.

Winter Quarter includes symposia and seminars covering the various clinical phases of physiology, biochemistry, pharmacology, pathology and bacteriology closely correlated with patient problems as related to the clinical specialties. (Emphasis is placed upon medical subjects.)

Spring Quarter includes anatomy of the surgical specialties, experimental surgery, gross and microscopic pathology, neuropathology, neuroanatomy and radiophysics. (Emphasis is placed on surgical subjects.)

University credit is granted. Tuition is \$110.00 per quarter.

APPLY TO DIRECTOR OF GRADUATE AND POSTGRADUATE MEDICAL EDUCATION, UNIVERSITY OF COLORADO MEDICAL CENTER, DENVER 7, COLORADO.

PUBLIC RELATIONS REPORTER

PUBLIC POLICY COMMITTEE

The Public Policy Committee at its last meeting discussed two projects which would expand the public relations program. One of these is a Press Conference to which representatives of all Oklahoma newspapers would be invited. A program of general interest would be given, with time saved for discussion periods in which both newsmen and doctors could bring their problems to the floor.

Another project under consideration is closer liaison with the various trade and professional organizations of Oklahoma which have a common ground with the medical profession in fighting for the preservation of the free enterprise system.

DR. NORTHCUTT HONORED

C. E. Northcutt, M.D., Ponca City, will be installed as president of the Conference of Presidents and Other Officers of State Medical Associations at their meeting in Washington, D. C., on December 4, just prior to the A.M.A. Interim Session.

Anyone attending the Interim Session is cordially invited to the sessions of the Conference. It is an organization devoted to the interchange of ideas between various State Medical Associations, with emphasis placed on the social, political and economic problems of the medical profession.

GRASS ROOTS CONFERENCE

The value of local leadership in the medical profession's fight against socialized medicine will be stressed at the Sixth National "Grass Roots" Conference which will be held in connection with the A.M.A. Interim Session in Washington, D. C., December 6-9. Officers of County Medical Societies who will be in Washington are urged to attend this meeting.

GRIEVANCE COMMITTEE

Oklahoma State Medical Association's Grievance Committee was in the spotlight at the A.M.A.'s second annual National Medical Public Relations Conference in Chicago November 5 and 6 when George H. Garrison, M.D., discussed "The Public Relations Value of a Grievance Committee."

Questions asked of Dr. Garrison and of the representatives of other State Medical Associations which have established similar

committees and boards indicated intense interest.

Newspapers in Oklahoma continue to comment favorably on the Association's action in setting up the Grievance Committee. For the most part, the press has treated in a sympathetic manner the major problem which has come to light during the committee's six months of existence — the problem of hospital costs for the medically indigent part of the population.

While this problem is not primarily the problem of either the committee or the Association, it is one which must be solved if the profession is to meet the overall problems which led to the establishment of a Grievance Committee.

BLUE CROSS GROWTH

More than 22 per cent of the entire population of the United States and 20 per cent of all Canadians were protected by Blue Cross Plans for hospital care as of June 30, 1949, according to the Blue Cross Commission.

Oklahoma's Blue Cross Plan showed a substantial increase in membership for the first six months of 1949, as did Blue Shield.

MEDICAL EDUCATION AND A B-36

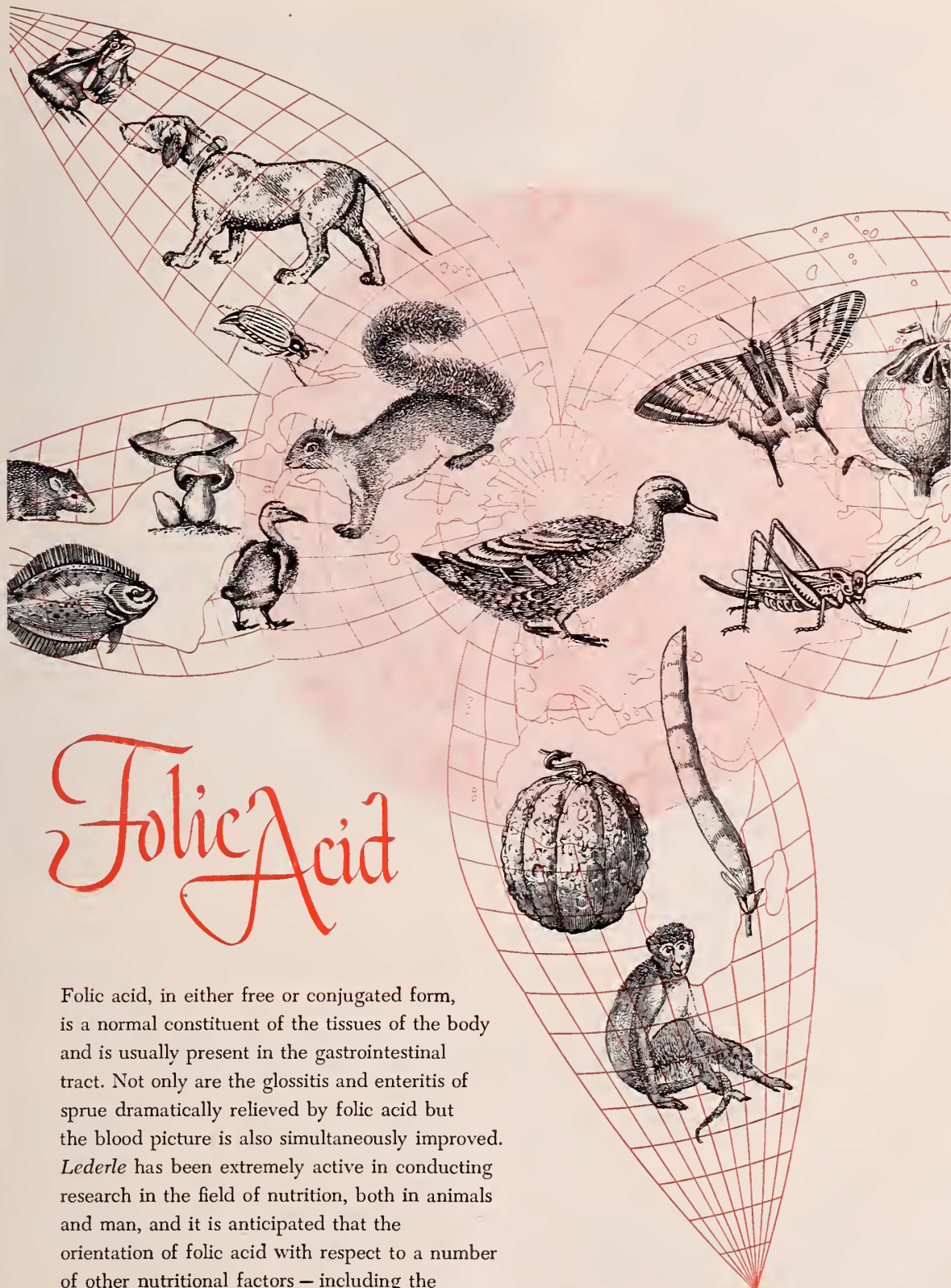
Speaking at Oklahoma City Clinical Society this fall, Carl A. Moyer, M.D., of Southwestern Medical College, Dallas, pointed out "The amount of money spent in this country each year for all undergraduate medical education is just about equal to that spent for the construction of one B-36 bomber."

FEE FOR BRITISH PRESCRIPTIONS

Austerity-weary Britons have faced severe standard-of-living reductions in recent months. An additional effort to pull the nation out of its economic spin is a fee of one shilling (14 cents) for prescriptions issued under the English socialized medicine plan, instead of having the prescriptions "free" at government expense.

NEW A.M.A. FILM

A new A.M.A. film "They Also Serve" portraying the physician's responsibility in times of major disaster is now available to medical societies, hospitals, and other groups interested in civil disaster planning on request to A.M.A. or the Executive Office.



Folic Acid

Folic acid, in either free or conjugated form, is a normal constituent of the tissues of the body and is usually present in the gastrointestinal tract. Not only are the glossitis and enteritis of sprue dramatically relieved by folic acid but the blood picture is also simultaneously improved. *Lederle* has been extremely active in conducting research in the field of nutrition, both in animals and man, and it is anticipated that the orientation of folic acid with respect to a number of other nutritional factors — including the anti-pernicious anemia factor and the animal protein factor — will soon be made clear.

INTERIM SESSION TO FEATURE SCIENTIFIC LECTURES; TELEVISION

"This Is Your Life" Broadcast To Originate from Meeting

Designed for the general practitioner, the third annual mid year meeting of the A.M.A. will be held in Washington, D. C. December 6-9.

The program for the session included scientific lectures and clinical sessions on an interesting variety of key topics by doctors who are outstanding authorities. The scientific and technical exhibits will dramatize developments in the progress of modern medical practice and actual surgical procedures originating in Johns Hopkins hospital will be shown by color television.

Highlight of the entertainment program will come Wednesday evening with a broadcast of Ralph Edward's famous radio show, "This is Your Life", followed by a stage show to which all attending the session are invited. Key figure of the broadcast will be a general practitioner whose identity will be kept secret until the broadcast begins.

Everything possible has been done to make the session interesting and valuable to the general practitioner.

The clinical sessions and the exhibits will be held in the National Guard Armory, Capitol Avenue and East 19th Street. The exhibit hall will be open throughout the meeting, 8:30 a.m. to 6 p.m. giving ample opportunity to study the latest additions to modern medical practice. The House of Delegates will meet at the Hotel Statler during this session. One of the first orders of business will be the annual selection of the general practitioner who has made an exceptional service contribution to his community. A gold medal will go with the honor.

CANCER SYMPOSIUM PROVES SUCCESSFUL

The Cancer Symposium held under the auspices of the Oklahoma Division of the American Cancer Society, the Oklahoma State Health Department, the Oklahoma State Medical Association and the Oklahoma State Dental Society, September 26 through 30, was very successful, reports J. R. B. Branch, M.D., executive director of the Oklahoma Division.

Speakers included: Morris K. Barrett, M.D., Secretary, Gastric Cancer Committee, National Advisory Cancer Council, Bethesda, Maryland; W. J. Merle Scott, M.D., Associate Surgeon, Strong Memorial Hospital and Rochester Municipal Hospital, Rochester, New York; Herman E. Pearse, M.D., Professor of Surgery, University of Rochester School of Medicine and Dentistry, Rochester, New York; and Galen M. Tice, M.D., Professor of Radiology, University of Kansas School of Medicine, Kansas City, Kansas (all for the east side of the state); and for the west side of Oklahoma, Gordon McNeer, M.D., Associate Attending Surgeon, Memorial Hospital, New York City; Eugene B. Brickner, M.D., Associate Professor of Surgery, Washington University School of Medicine, St. Louis, Missouri; and John C. Howell, M.D., Professor of Clinical Surgery, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania. Sessions were held in Tulsa, Enid, Oklahoma City, Edwards Memorial Hospital and Oklahoma County Medical Society dinner meeting), Lawton, Clinton, Woodward, and others.

Those who attended are asked to send their suggestions or criticisms to Gregory E. Stanbro, M.D., Chairman of the Professional Education Committee, American Cancer Society, 937 Commerce Exchange Building, Oklahoma City, Oklahoma.

ENROLL NOW FOR THIRD CIRCUIT POSTGRADUATE COURSE

Second circuit of the postgraduate course in internal medicine which includes the centers of Poteau, McAlester, Okmulgee, Muskogee and Tahlequah, will close December 16.

Reports from this circuit are very gratifying to the Committee. The attendance has been excellent. Robert M. Becker, M.D., instructor, welcomes consultations with the physicians attending his lectures on the afternoons that the lecture is to be in their center that night. Physicians enrolled should contact the Clinic Chairman or Doctor Becker direct to set an hour for their private consultations.

The third circuit will open the week of January 9, 1950, and run through March 17, 1950. The counties included in this circuit are: Pontotoc, Coal, Atoka, Pushmataha, McCurtain, Choctaw, Bryan, Johnston, Murray, Carter, Love and Marshall. The teaching centers are scheduled to be: Ada, Ardmore, Durant, Hugo and Idabel. Physicians in this circuit are urged to mail their enrollments in to the Postgraduate Committee, 210 Plaza Court, Oklahoma City, promptly upon receipt of the announcement letter.

O.S.M.A. REPRESENTATIVES ATTEND CHICAGO CONFERENCE

Four representatives of the Oklahoma State Medical Association joined physicians from all parts of the country charged with the responsibility of interpreting the profession and its problems to the general public at the second annual medical Public Relations Conference in Chicago Nov. 5 and 6.

Attending the conference sponsored by the public relations department of the American Medical Association were John W. Records, M.D., vice chairman of the O.S.M.A. Public Policy Committee; George H. Garrison, M.D., O.S.M.A. President; Jack Spears, Executive Secretary of the Tulsa County Medical Society; and John K. Hart, Associate Executive Secretary, O.S.M.A.

Dr. Garrison appeared at the afternoon session Saturday, November 5, where he explained the public relations value of a grievance committee.

Preceding the Public Relations Conference was the annual Secretaries-Editors Conference November 3 and 4 in which the Oklahoma representatives also participated.

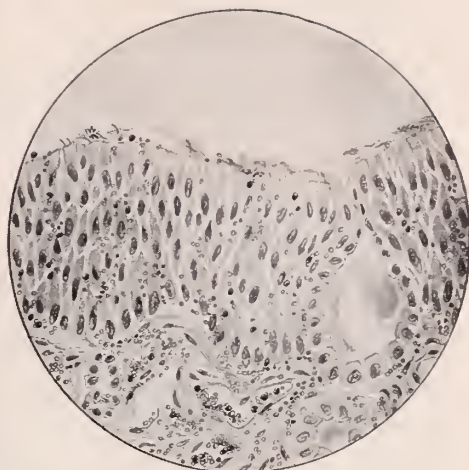
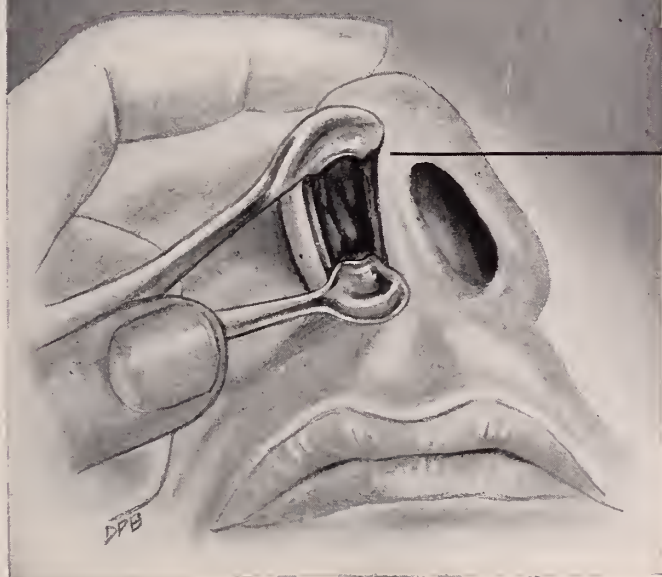
RESEARCH INSTITUTE DIRECTOR IS SPEAKER

Stanley P. Reinmann, M.D., Director of the Research Institute at the Lankenau Hospital, Philadelphia, spoke in Oklahoma City November 11. Dr. Reinmann was principal speaker at a luncheon of the Southwestern Association for Cancer Research and also addressed the junior and senior medical students. That evening he addressed the staff meeting at University Hospital.

DO YOU KNOW?

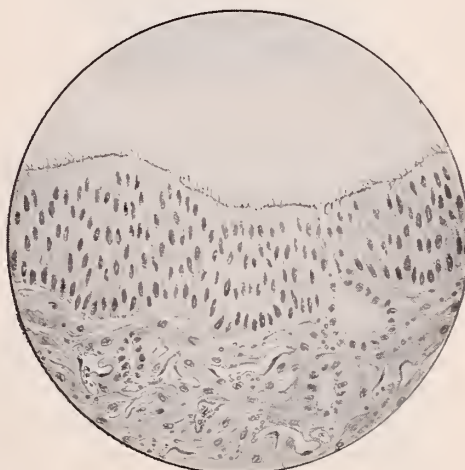
That this issue of the Journal carries the first of a series of monthly columns titled "That More May Know" — about the current progress of the Oklahoma Medical Research Foundation. Watch for news of the Research Foundation through this column. "That More May Know" appears on Page 546 of the December Journal.

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aeration . . . free drainage
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. . . sinusitis



Nasal membrane showing increased leukocytes with denudation of cilia.

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Many doctors are prescribing "Daricraft Homogenized Evaporated Milk". It is always uniform, safe, sterilized, easy to digest, and high in food value and minerals. Daricraft contains 400 U. S. P. units of Vitamin D per pint.



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ATTEND COLLEGE OF SURGEONS CONGRESS

Forty-six Oklahoma physicians attended the Clinical Congress of the American College of Surgeons October 21, 1949. They are:

Floyd T. Bartheld, McAlester; Vance A. Bradord, Oklahoma City; W. H. Buchan, Tulsa; Arthur L. Buell, Okmulgee; Hal A. Burnett, Oklahoma City; Harrell C. Dodson, Jr., Oklahoma City; Herbert J. Forrest, Tulsa; Phillips R. Fife, Guthrie; Frank L. Flack, Tulsa; Wm. T. Gill, Ada; A. R. Grant, Muskogee; I. J. Haugen, Ada; Charles A. Hulse, Tulsa; Thornton Kell, Ardmore; Joseph W. Kelso, Oklahoma City; Albert A. Krause, Muskogee; and

Ray H. Lindsey, Pauls Valley; Carl Lindstrom, Tulsa; Paul B. Lingenfelter, Clinton; Wm. McClure, Chickasha; Ralph A. McGill, Tulsa; Ian Mackenzie, Tulsa; J. J. Maril, Oklahoma City; J. F. Messenbaugh, Oklahoma City; Edward L. Moore, Tulsa; M. H. Newman, Shattuck; Charles M. O'Leary, Oklahoma City; Paul J. Ottis, Okarche; Joe M. Parker, Oklahoma City; Hugh Perry, Tulsa; Fred A. Quenzer, Oklahoma City; J. L. Richardson, Tulsa; Robert E. Roberts, Stillwater; Howard B. Shorbe, Oklahoma City; John F. Simon, Alva; Gregory E. Stanbro, Oklahoma City; L. J. Starry, Oklahoma City; Samuel N. Stone, Jr., Oklahoma City; Averill Stowell, Tulsa; and

Benjamin W. Ward, Tulsa; A. J. Weedn, Duncan; A. Ray Wiley, Tulsa; Harry Wilkins, Oklahoma City; and Neil W. Woodward, Oklahoma City.

FELLOWSHIPS CONFERRED ON OKLAHOMANS

Twelve Oklahoma Physicians were among the 921 initiates who were received into fellowships by the American College of Surgeons at the convocation October 21, which was the closing session of the 35th annual clinical congress in Chicago.

Those from Oklahoma receiving the fellowships are: Vance A. Bradford, Oklahoma City; John M. Carson, Shawnee; William T. Gill, Ada; Charles A. Hulse, Tulsa; Thornton Kell, Ardmore; Albert H. Krause, Muskogee; Samuel T. Moore, Oklahoma City; Fred A. Quenzer, Oklahoma City; Robert E. Roberts, Stillwater; Howard B. Shorbe, Oklahoma City; Samuel N. Stone, Jr., Oklahoma City; and Neil W. Woodward, Oklahoma City.

OBITUARY

Duke William Vincent, M.D.
1893-1949

Duke William Vincent, M.D., physician at Vici for 22 years, died September 23 while he was at work at his clinic.

Dr. Vincent attended the Hot Springs, Arkansas high school and then attended the University of Oklahoma. Upon his graduation from college, he entered the Army Medical Corps and was commissioned a captain. He was a member of the American Legion and a Mason.

Survivors include his widow of the home and two daughters.

A. M. A.

THIRD ANNUAL CLINICAL SESSION

Washington, D. C.

December 6 - 9, 1949

Program Designed to Meet the Needs and Interests of the General Practitioner

- . . . Scientific lectures and clinical session
- . . . Scientific and technical exhibits
- . . . Actual surgical procedures from Johns Hopkins Hospital shown by color television
- . . . Entertainment including a broadcast of Ralph Edward's "This Is Your Life" featuring a general practitioner whose identity will be kept secret until the broadcast begins.

Dermatology and Syphilology
Lee McCarthy, M.D., Washington

X-Ray Diagnosis
Aubrey O. Hampton, M.D., Washington

Fluid Balance in Cardiac and Renal Failure in
Traumatic Shock and in Nephritis
Robert Elman, M.D., St. Louis

Hematuria
H. L. Kretschmer, M.D., Chicago

Laboratory Diagnosis, Including Exfoliative Cytology
Frank W. Kinzelmann, M.D., Atlantic City

Chronic Diarrheas
Matthew White Perry, M.D., Washington

Cardiovascular Disease Including Hypertension
and Peripheral Vascular Disorders
Clayton B. Ethridge, M.D., Washington

Arthritis
Darrell Crain, M.D., Washington

Poliomyelitis
Hart E. Van Riper, M.D., New York

Virus, Rickettsial Diseases and Obscure Fevers
Hobart Reinmann, M.D., Philadelphia

Pediatrics
Julius Hess, M.D., Chicago

Neurology and Psychiatry
C. Charles Burlingame, M.D., Hartford

Diabetes
Howard Root, M.D., Boston

Physical Medicine, Rehabilitation and Fractures
Frank H. Krusen, M.D., Rochester

Problems of Delivery
W. F. Mengert, M.D., Dallas

Cancer
Brewster Miller, M.D., New York

Disease of the Chest
J. A. Meyers, M.D., Minneapolis

Liver Disease and Jaundice
O. Benwood Hunter, M.D., Washington

THAT MORE MAY KNOW

That More May Live Longer



After five years of dreaming, talking and hoping, the Oklahoma Medical Research Foundation is rapidly taking shape, so that those who have worked for so long can now begin to see the results of

their interest.

Workmen are laying the floor of the third story of the Research building, located just east of the University of Oklahoma School of Medicine in Oklahoma City. The construction schedule calls for completion of the building in June, 1950.

The structure, carefully designed after lengthy study, will offer the finest facilities available for true scientific research "That More May Live Longer," and will focus the attention of the research world on Oklahoma, which will have the most democratic, most unusual research institution in the United States, because of its creation on the broad base of voluntary giving by the professional and lay people of this area.

Research and Building Fund Campaign

It is not generally known, that 40 per cent of the residents of Oklahoma have not yet even been asked to participate in the program to bring medical research to Oklahoma.

For that reason, final plans are now being laid for a fund raising campaign which will be made in 31 counties of Oklahoma, with the schedule calling for completion of the work by January 31, 1950.

The campaign will be among the lay people of those 31 counties, where a solicitation has not been made. The Honorable Roy J. Turner, Governor of Oklahoma, is serving as general campaign chairman, with Mr. Tom Dee of Oklahoma City as the vice-chairman for the counties in the western half of the state, and Mr. W. K. Warren of Tulsa as the vice chairman for the counties in the Tulsa area.

Particularly in the Tulsa area, the physicians are making plans to complete their work in the campaign

at the same time, but as in the past, the physicians, dentists and other professional groups will make their own campaign.

The fund raising effort is necessary because Oklahoma is still short of the sum needed to construct the building, and provide the funds needed for a sustained, worthwhile program of research.

Scientific Personnel

The research committee of the Foundation, headed by Dr. Henry H. Turner, Oklahoma City, is making an active search for the best qualified man possible to take the position of scientific co-ordinator of the organization. Interviews are being held with well known scientists and a genuine effort is being made to secure the best man available for this key position.

It is hoped and planned that the selection will be made by January 1, to give the person selected time to select his scientific staff and prepare for the beginning of operation by next summer.

Pledge Report

The physicians, other professional groups and the lay people of the Sooner State are continuing their support of the Foundation. Here is the latest statement of pledges:

| | No. | Pledged | Amount | Goal |
|-------------------------|-------|---------|-----------|------------------|
| Doctors of Medicine | 662 | \$ | 563,285 | \$1,000,000* |
| | | | | *long range goal |
| Dentists | 227 | | 145,789 | 255,000 |
| Pharmacists | 508 | | 134,440 | 300,000 |
| Medical Service Society | | | 5,000 | |
| Nurses | 1,234 | | 53,067 | 50,000 |
| Technicians | 59 | | 5,670 | |
| General Public | 4,262 | | 1,448,921 | 1,870,000 |
| Totals | 6,953 | \$ | 2,356,173 | \$3,000,000 |

As is obvious, the job isn't finished, but it's well underway.

Officials of the Foundation are indeed grateful for this opportunity to report to the medical profession on a regular schedule, through The Journal each month.

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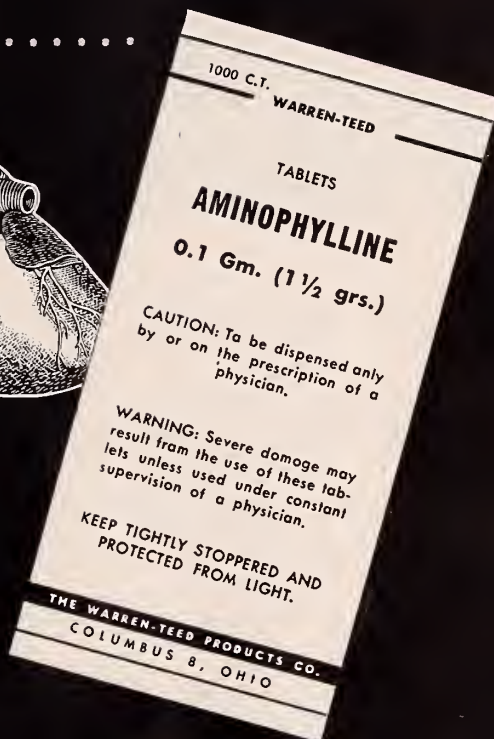
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HAVE YOU HEARD?

Robert A. McLaughlin, M.D., formerly of Wetumka, has moved to Okeene.

Charles Green, M.D., Lawton, attended a conference Oct. 20-22 at Children's Memorial Hospital in Washington, D.C., with which he was associated before coming to Lawton.

C. Riley Strong, M.D., El Reno, arranged a recent farmer-friendship program at the Lions Club of that city.

Joe L. Duer, M.D., Woodward, was guest speaker at the Oak Park P-TA recently.

M. V. Stanley, M.D., formerly of Tulsa, has opened offices in Pryor.

Ralph Martin, M.D., Sand Springs, has purchased a building in that city and plans to remodel it into a nine room clinic.

John McIntyre, M.D., Enid, was one of the four members of the Enid Kiwanis Club who told members "Things I like About My Job and Things I Dislike About It."

C. W. Letcher, M.D., Miami, spent 10 days active duty with the U.S. Navy in Washington, D.C., where he completed a course in atomic medicine and radioactive isotopes.

Harold Muchmore, M.D., Oklahoma City, spoke to the Ponca City Kiwanis club recently describing some of the newer drugs which have been developed.

Keith Oehlschlager, M.D., Yale, recently attended the Kansas City Southern Clinical Conference.

Francis Dill, M.D., Oklahoma City, has been made a Knight of St. Gregory, a special honor bestowed by the Pope for exemplary services in the field of religion and social welfare.

Leslie T. Hamm, M.D., Lawton, presented a .32 caliber rifle to the winner of an elimination contest conducted by the American Legion rifle club.

Raymond Dougherty, M.D., Perry, has been installed as a member of that city's Rotary club.

Boyd M. Saviers, M.D., a University of Oklahoma School of Medicine graduate, has opened an office in Heavener.

J. M. Gordon, M.D., has been named director of the Marshall County Health Department.

E. Hallsell Fite, M.D., Muskogee, was named president of the South Central Section, American Urological Society.

E. C. Mohler, M.D. and *Edwin C. Yeary, M.D.*, Ponca City, are remodeling the lower floor of the old telephone building there for their offices.

V. M. Rutherford, M.D., Midwest City, recently attended a 30 day graduate course in surgery in Chicago.

Mark Holcomb, M.D., Enid, spoke on polio and its treatment at a Garfield P-TA meeting.

O. R. Gregg, M.D., Norman, is the new medical director for the Oklahoma Cerebral Palsy institute at Norman.

Walter Hardy, M.D. and Mrs. Hardy, Ardmore, recently celebrated their 39th wedding anniversary.

G. H. Guthrey, M.D., Oklahoma City, was the principle speaker at a meeting of the Comanche County chapter of the Oklahoma Mental Hygiene Committee in Lawton recently.

F. M. Adams, M.D., Vinita, was one of 11 persons elected directors of the Oklahoma social welfare division in Oklahoma City recently.

Clinton Gallaher, M.D., Shawnee, traced the growth of the AMA at a Wewoka Rotary Club meeting.

W. K. Walker, M.D., Marlow, showed films on tuberculosis at a Lions Club meeting there recently.

George Ross, M.D., Enid, spoke on atomic facts before the Enid Kiwanis Club.

S. A. Lang, M.D., Nowata, was elected chief of staff of the Nowata Hospital.

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MEDICAL SOCIETIES AROUND THE STATE

Northwest Counties

The Northwest Counties Medical Society held its regular meeting Thursday, October 13, as guests of the Newman Clinic at Shattuck. More than 40 physicians and guests attended the dinner served by the Methodist ladies of Shattuck after which separate meetings of the society and auxiliary were held at the clinic building. The program, "Symposium on Poliomyelitis", was given by Steve Beller, M.D., Henry Streng, M.D., and James C. Amspacher, M.D., all of the University of Oklahoma School of Medicine. This was one of a series of post graduate instruction which the University of Oklahoma School of Medicine has inaugurated to bring the latest ideas in medical progress to the doctors of the state. The next meeting will be at the hospital at Supply, Thursday, December 8 with Dr. Johnson and his staff as hosts.

Muskogee-Sequoyah-Wagoner

A clinical pathologic conference was conducted by Howard C. Hopps, M.D., pathologist at the University of Oklahoma School of Medicine and consultant in pathology at the Muskogee Veterans Hospital, at the regular meeting of the Muskogee-Sequoyah-Wagoner Counties Medical Society.

Comanche

George H. Garrison, M.D., O.S.M.A. President from Oklahoma City, addressed the Comanche County Medical Society on the overall state medical program. Dr. Garrison was accompanied to Lawton by Mrs. Garrison, who spoke to the Auxiliary, and Dick Graham, executive secretary. At the business session, the group voted to become affiliated as member of the Blue Cross hospitalization plan.

Cleveland County

"Communicable Diseases" was the program topic when the Cleveland County Medical Society met recently. Speakers were Dr. Kirk Mosley, professor of epidemiology in the University school of public health and Dr. James O. Walls of the Oklahoma Department of Public Health.

Carter County

Four new members' applications were approved at the Carter County Medical Society meeting. Members approved were Malcolm Horne, Lloyd Long, Willis Jondahl and Claran Jesse. A color motion picture on intravenous anesthesia concluded the program. Twenty-one members were present.

Washington-Nowata

The Washington-Nowata County Medical Society endorsed an American Red Cross proposal to participate in a regional blood bank with headquarters at Wichita, Kansas, when 55 doctors and their wives met in Nowata recently. Principal speaker at the meeting was Dr. Harry Stewart, head of the anesthetics department, St. John's Hospital, Tulsa.

Kay-Noble

The Kay-Noble County Medical Society has voted to provide free medical care to foster children under the supervision of the Kay county child welfare unit when the foster parents are unable to pay for medical care. Dr. Nick Taylor of Oklahoma City, head of the department of physiology at the University of Oklahoma School of Medicine spoke on physiology of the heart as the principal speaker on the program following the business meeting.

Osage

A joint dinner of the Osage County Medical Society and Auxiliary was held recently in Pawhuska when the programs for the year were discussed. Approximately 15 physicians and their wives attended.

Custer-Beckham-Roger Mills

A tri-county meeting was held recently of physicians from Custer, Beckham and Roger Mills counties with 21 doctors in attendance. Paul Gallaher, M.D., Shawnee, was principal speaker.

Greer

A joint meeting of the Greer County Medical Society and the Southwest Baptist Hospital staff was held recently. Jack Jacoby, M.D., Wichita Falls, Texas, spoke to the group on brain injuries.

Pontotoc

Honorary membership certificate of the Oklahoma State Medical Association was presented to Sam A. McKeel, M.D. of Ada recently at a meeting of the Pontotoc County Medical Society. Dr. McKeel, who also wears a 50 Year Pin, is a past president and counselor of the state Medical Association. The presentation was made by E. M. Gullatt, M.D., Ada. George H. Garrison, M.D., Oklahoma City, O.S.M.A. President, was also present for the meeting which had an attendance of approximately 40.

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BOOK REVIEWS

ATLAS OF ROENTGENOGRAPHIC POSITIONING.

Vinita Merrill. Two Vols. St. Louis, C. V. Mosby Company. 1949.

This work (format 9" x 12") consists of two beautiful volumes with decorated cover on which one finds an unusual feature seldom seen in other texts. The sections taken up are listed on each cover so that one can, at a glance, ascertain whether he has the desired volume. From an examination of the table of contents it is immediately obvious that this is an inclusive opus. It is the culmination of the author's 18 years experience as a medical x-ray technician in hospital and office practice, plus an extensive review of the foreign and American radiographic literature of the past 52 years.

The organization of the material presented is logical, integrated and sequential. A detailed discussion of the preliminary steps in roentgenography contains many facts learned only by experience; in addition emphasis is properly placed on the technician's behavior toward the patient, the radiologist and fellow students. Many helpful hints are included concerning the care of the radiographic room, aseptic, isolation and operating room techniques, preparation instructions, etc. Then follows a section on general anatomy and anatomical terms. Finally, the author comes to the most important phase of her work, accurate body positioning. Following a brief, but pointed, discussion of the anatomy and physiology of the particular system, the actual positioning procedure is described in detail and in clear and concise manner. This portion of the book is copiously supplemented by photographs, reproductions of the X-rays and diagrams.

The illustrations, on the whole, are excellent, excepting for some on the skull, chest and spine concerning which the reviewer feels that the originals might have been more carefully selected. Many of the contrast methods, both routine and specialized are described. These include myelography, pneumoencephalography, angiocardiology, placentography, fetography, etc. Several roentgen pelvimetry methods are outlined. The author is to be commended in that she has exhibited restraint and good judgment in including only those techniques which are popular, useful and practicable. Both volumes contain a detailed glossary of anatomical and medical terms, an index and extensive bibliography. Adequate references are available for those wishing to do research or otherwise expand their knowledge in this field.

It is essential that the good technician have an adequate foundation of anatomy and physiology, for how else can he know what he is doing, and what the outcome of his painstaking labor will be? Very much depends upon the final radiographic result since it is no exaggeration to state that the patient's life may depend upon what is seen or not seen on the radiograph. The author has been acutely aware of this salient fact and fundamental concept for she disassociates, to the very minimum, the structure and function of the part being radiographed from the procedure of positioning.

Perhaps many will note the absence of chapters on the physics and chemistry of X ray. The authors defense for this deletion may be three-fold: Firstly, her sole purpose was to compile an all inclusive list and

description of the many recognized standard and special positioning techniques. Secondly, only a superficial treatment of these two sciences could have been included. Thirdly, physics and chemistry, as pertaining to X-ray technique, are adequately covered in all X-ray texts.

No textbook irregardless of subject is perfect and can replace the personal instruction of the individual. This text comes as near to accomplishing the ideal as any known to the reviewer, and should be in the library of every technician and radiologist, since it can most adequately serve as a text for teaching or reference purposes. It is the answer to the technician's prayer.

—Lucien M. Pascucci, M.D.

MOSBY'S COMPREHENSIVE REVIEW OF NURSING. St. Louis, 1949, C. V. Mosby. Price: \$5.75.

This book is intended as a study outline for graduates or basic students who wish a clear, concise summary of the material covered in the basic nursing course. It should also be helpful to the new instructor in selecting course content.

In the introduction the publishers give suggestions to the student as to how to use the book most effectively. The plan of the book may be readily seen from the table of contents. The subject matter is arranged according to the main areas in the nursing curriculum, namely the biological and physical sciences, the medical sciences, the social sciences, nursing and the allied arts. For clear presentation each area is subdivided according to courses; for example, the area of Nursing and Allied Arts includes Nursing Arts, Nutrition and Diet Therapy, Medical Nursing, Surgical Nursing, Orthopedic Nursing, Nursing of Children, and Obstetrical Nursing. One wonders why psychiatric nursing has been omitted as a clinical course. An effort has been made to integrate the basic sciences and nursing arts with the clinical nursing subjects.

For each course a bibliography precedes the outline and concludes with a comprehensive list of questions. The questions are of the objective type and include many of the situation type which should be helpful to a nurse preparing to take the State Board Test Pool Examinations or any of the achievement tests of the National League of Nursing Education. Answers have purposely been omitted to encourage the student to do additional reading from the references suggested in the bibliography and to think through for the best answer.

The book is large and bulky in size and certainly is not the type review book one could use on a bus or in a restaurant. The cover is paper and probably will not stand very vigorous use; the publishers are no doubt safe in using the paper binding. There is no index, which necessitates the use of the table of contents.

A significant feature of the book is that nine of the 10 member editorial panel are nurses and all experts in their field. The other member is a dietitian. Previous efforts in this type of nursing literature have been, principally, a digest of state board questions and answers. The publishers are to be commended for undertaking a work of this type.—(Mrs.) Juanita Granger Millsap, Wesley School of Nursing, Oklahoma City, Oklahoma.

BOOK REVIEWS (Continued)

CARE OF THE SURGICAL PATIENT. Edited by Jacob Fine. W. B. Saunders Company, Philadelphia and London. 1949.

This book is not written to be used as a text book of surgery but as a reference and guide book in the active and post operative care of surgical patients. It is a very systematized and well organized work going into detail on medicines and procedures used in treating operative patients and intervening disorders as well as upsets in normal functions of the body.

The author has recognized authorities on individual diseases, disorders, and surgical procedure by having them assist him in writing and organizing the chapters on specialties.

The book is divided into six sections with chapter sub-divisions. The first section considers physiology, both normal and abnormal, as far as fluids, blood, and body requirements are concerned. It then has a chapter on all the new drugs and antibiotics and the infections which respond to them. The second section is rather long and very comprehensive in covering regional and special surgery. Under this he discusses burn, neurosurgery, dental disorders, and then considers specific surgeries. The latter includes individual surgical problems of the head and neck, breast, chest, gastro-intestinal tract, abdomen, ano-rectal, urologic, gynecologic, vascular and orthopedic. Also considered are the abdominal organs, liver, pancreas, and spleen. Each individual chapter discusses diagnosis, pre and post operative care of the surgical procedure, and at times the surgical procedure is discussed.

Section three discusses endocrine diseases, the diagnosis of pathology of the glands, and medical and surgical treatment of them.

Section four is an extremely important discussion of coincidental medical illnesses in surgical patients. Here the care and cautions required in doing surgery on people with renal, cardiac, skin, blood, and diabetic disorders are fully covered. The surgical risk, operative and post operative care and active treatment of these illnesses are discussed.

Clinical and laboratory methods used preoperatively as well as blood bank and blood transfusions are covered in Section 5. There are also short chapters on clinical chemistry and clinical pathology.

General preoperative and postoperative care discussed in Section 6 deserves study and repeated readings. Here preoperative care of normal, psychotic, and child patients is discussed. The author then goes into general preparation of regions. The pros and cons of pre-anesthetic medications, and types of anesthetics are discussed. Then postoperative care, care of the operative wounds and complications and their treatment follow in normal sequence.

The last three chapters are discussions of oxygen therapy and special and specific medications on treatment of acute poisonings.

This publication will be useful to any physician, surgeon or not, as many medical problems are well covered in it.—Thomas C. Glascock, M.D.

AMERICAN BOARD OF OBS.-GYN.—Next written examination and review of case histories (Part I) for all candidates will be held in various cities Friday, February 3, 1950. Application forms and bulletins are sent upon request made to Paul Titus, M.D., Secretary-Treasurer, American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pa.

THE USES OF PENICILLIN AND STREPTOMYCIN. Chester Scott Keefer, M.D., Wade Professor of Medicine; University of Kansas Press, 1949. 72 pages. Price \$2.00.

This booklet is an authoritative summary of what is known concerning two therapeutic agents of great importance in modern medical and surgical practice. The first section discusses the forms of penicillin used in treating infections; dosage; bacterial resistance; and the effects of penicillin on various diseases. The second deals with the nature of streptomycin; bacterial sensitivity and reactions to streptomycin; routes of administration; and the response to streptomycin in various diseases. The third section outlines a fascinating chapter in the history of medicine, the story of antibacterial agents from the days of Koch and Pasteur to the times of Fleming and Waksman and their associates. The book includes an index.

—J. W. Morrison, M.D.

MAYO CLINIC DIET MANUAL, 329 pages, Copyright 1949, W. B. Saunders Co.

As the title indicates, this book is a manual, not a textbook on dietetics, and the material included was compiled for the guidance of the personnel of the Mayo Clinic. The demand for copies of the manual was so great by outsiders that publication on a commercial basis was necessary.

Standard diets are included in the manual for almost any medical or surgical patient and the same pattern of presentation is employed throughout, so that one familiar with the manual may locate any desired information with a minimum of search. An approximate composition is given in table form for each diet, listing the proteins, carbohydrates, fats, calories, minerals and vitamins. This table is followed by a short statement as to the adequacy and general description of the diet and, where special instructions are required, as to the preparation. Another table lists foods included and excluded in that particular diet, and finally a sample menu is given.

This manual appears to fit a need for a concise source of information, when a discussion of theoretical and academic aspects of diets are not required, and should be of considerable value to the busy physician.

—Sanford Matthews, M.D.

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Hyperthyroid
Menopause

Nausea and Vomiting

Functional or organic disease
(acute gastrointestinal and emotional)
X-ray sickness
Pregnancy
Motion sickness

Gastrointestinal Disorders

Cardiospasm
Pylorospasm
Spasm of biliary tract
Spasm of colon
Peptic ulcer
Colitis
Biliary dyskinesia

Allergic Disorders

Irritability
To combat stimulation of
ephedrine alone, etc.

Irritability Associated With Infections

Restlessness and Irritability With Pain

Central Nervous System

Paralysis agitans
Chorea
Hysteria
Delirium tremens
Mania

Anticrampant

Traumatic
Tetanus
Strychnine
Eclampsia
Status epilepticus
Anesthesia

OBSTETRICAL

Nausea and Vomiting

Eclampsia

Amnesia

HYPNOTIC

Induction of Sleep

SURGICAL

Preoperative Sedation

Basal Anesthesia

Pastoperative Sedation

PEDIATRIC

Sedation for:

Special examinations
Blood transfusions
Administration of parenteral
fluids
Reactions to immunization
procedures
Minor surgery

Preoperative Sedation

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KEY TO ABBREVIATIONS

(S)—Scientific Article
(E)—Editorial
(SA)—Special Article
(A)—Announcements
(BR)—Book Reviews
(TC)—Therapeutic Conference

(ABS)—Abstract
(O)—Obituary
(PIC)—Picture
(GN)—General News
(CPC)—Clinical Pathologic Conference
(CTC)—Clinical Tumor Conference

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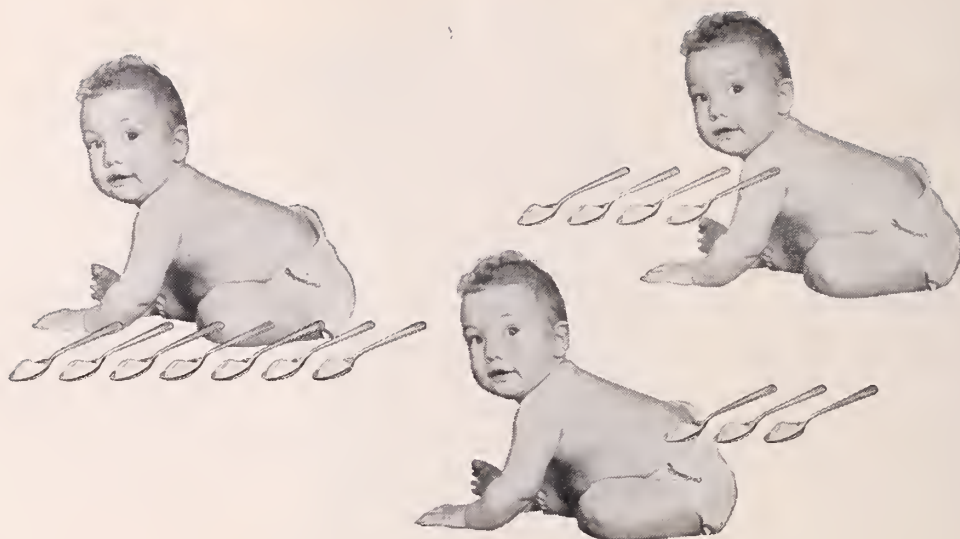
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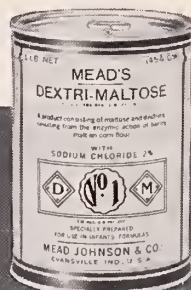
PHYSICIANS concerned with infant feeding have found that the exceptional *flexibility-of-use* offered by Dextri-Maltose* is an important advantage in adapting formulas to the individual requirements of the baby.

By the inclusion of Dextri-Maltose in appropriate amount, the caloric value and carbohydrate content of a formula can easily be adjusted to the infant's special needs.

Since the physician has 5 forms of Dextri-Maltose available, an individual infant's formula may be changed according to various clinical or physiologic indications without disturbance of his routine.

Being a mixture of carbohydrates, Dextri-Maltose offers special qualities of digestibility and slowness of absorption. Hence it is an ideal carbohydrate for use in diarrhea and other gastrointestinal disturbances.

Dextri-Maltose dissolves rapidly in water or milk. It can be used in *your* preferred method of formula preparation. *T.M. Reg. U.S. Pat. Off.



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